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THÈSES CANADIENNES SUR MICROFICHE

UNIVERSITY OF ALBERTA
OCT 3 1978
FACULTY OF GRADUATE STUDIES AND RESEARCH

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TITLE OF THESIS/*TITRE DE LA THÈSE* A SYSTEM CONCEPTUAL MODEL OF SPECIAL EDUCATION ADMINISTRATION

UNIVERSITY/*UNIVERSITÉ* UNIVERSITY OF ALBERTA (EDMONTON)

DEGREE FOR WHICH THESIS WAS PRESENTED/ *GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE* Ph. D EDUCATIONAL ADMINISTRATION

YEAR THIS DEGREE CONFERRED/*ANNÉE D'OBTENTION DE CE GRADE* 1978

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THE UNIVERSITY OF ALBERTA

A SYSTEMS CONCEPTUAL MODEL OF SPECIAL EDUCATION ADMINISTRATION

by

ⓒ ARTHUR GELINAS

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA
FALL, 1978

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "A Systems Conceptual Model of Special Education Administration" submitted by Arthur Gélinas in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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To Lyse, Catherine, Mélanie and Pascal.

ABSTRACT

A systems conceptual model of special education administration was developed through a deductive approach. Special education was studied under a conceptual specification derived from the use of General Systems Theory as an interpretative model. The study prescribed a set of organizational propositions or conditions under an open system view of man, of exceptionality, of the adaptation process, and of the educational process.

The model was located in the evolution of ideological and operational trends in special education.

An administrative strategy of special education was based on the use of a long range planning model for education. The planning model was also identified for the implementation of the special education model as part of regular education.

The conceptual model of special education was also used for a comparative study of special education delivery systems under an integration perspective in Sweden, Holland, France and the Province of Québec.

ACKNOWLEDGMENTS

The writer wishes to express his sincere thanks to Dr. E. Seger, supervisor of the thesis, and to the other members of the committee for their assistance during the study.

The writer is also indebted to Miss Lucette Lessard for her technical assistance and support throughout the study.

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Chapter I

INTRODUCTION

Nearly all educational systems have been confronted with the need to organize a set of unique programs for some clients that appeared to have difficulties in their educational development. These unique programs have come to be known as special education. In 1959, the United Nations Organization proclaimed the right of all children to a free and compulsory education.

> L'enfant a droit à une education qui doit être gratuite et obligatoire au moins aux niveaux élémentaires. Il doit bénéficier d'une éducation qui contribue à sa culture générale et lui permet, dans des conditions d'égalité de chances, de développer ses facultés, son jugement personnel et son sens des responsabilités morales et sociales et de devenir un membre utile de la société. (ONU, 1959, principe 7).

This declaration calls for educational services to be offered to all children, including children with special needs. Most nations which have signed this declaration have been involved in the establishment, in their educational systems, of a set of services for exceptional children;

however, as shown by a UNESCO (1970) study, there are many different ways in which different countries have developed their special education delivery systems. There are even differences in the definition of exceptional children and of special education itself.

Also, the evolution of knowledge in special education has been marked by a wide variety of educational strategies elaborated from different theoretical points of view. Therefore, today's literature and practice in organization of special education is characterized by many different and sometimes contradictory approaches.

At another level, the trends in the organization of education are leading to the establishment of long-range planning processes in order to rationalize the use of resources for educational purposes and to control the development of educational systems. Since the latest trends in special education are concerned with the integration of exceptional children into the regular educational systems, the educational system planning process should allow for such a strategy. The questions then become: "What are, for the educational systems, the possible administration planning processes to be implemented in order to take into account the latest trends in special education?" "To what extent can special education be defined so as to make all special and regular educational processes a common endeavor?" "How can the definition of special education contribute to the integration of exceptional children into the regular educational system?" These are all crucial questions that educational systems are trying to answer. This study is an attempt to contribute to the solution of such problems.

THE PROBLEM

The problem of this study was composed of four main parts:

1. To analyse past and current trends in special education in order to discriminate among approaches or elements of approaches.

2. To elaborate a systems conceptual model of special education for its functional integration into regular education administration.

3. To identify a planning strategy that would facilitate the implementation of the special education model.

4. To analyse the practices of different educational systems in relation to the model of special education developed in this study.

It should be noted that the main interest of this study was the elaboration of a conceptual model of special education that would facilitate the integration of special education within the regular education delivery system and the identification of a planning strategy for the implementation of this model. Therefore, the last part, the analysis of different educational systems, is presented only as an illustration of the use of the model and of the derived planning strategy.

SUB-PROBLEMS

The following sub-problems were examined in the development of the model:

1. The establishment of a typology of special education trends.

2. The use of General Systems Theory as an interpretative model for the elaboration of a conceptual model of special education.

3. The use of a comprehensive planning model for the administrative integration of the special education model in the regular education planning process.

The first sub-problem was examined in order to clarify the evolution of special education practices. The objective of this part of the study was to identify in the literature and to classify available models of special education. The establishment of a typology of special education trends served the purposes of:

- identifying and discriminating among several trends
- grouping trends under specific categories
- analysing the basic beliefs, effects and criticism of each trend
- understanding the location of the special education model developed in this study among these trends.

The second sub-problem was concerned with the use of an interpretative model for "modelizing" special education. For Kaplan (1964, p. 257), an interpretative model "corresponds to a set of postulates or a system of equations, not specifically 'about' anything" and "thus a model for a theory". An interpretative model is in itself a model in a formal theoretical form. In this study, General Systems Theory was used as an interpretative model in order to develop a conceptual model of special education.

The third sub-problem was examined in order to develop a strategy for the implementation of the conceptual model of special education. The aim of this part of the study was to facilitate the implementation of the special education model in educational systems. It was assumed that new operational means of special education could not be sufficient. What was needed represented an operational process for the integration of the special education model as part of regular education. Therefore the strategy used was the integration of the special education model in a comprehensive educational planning strategy. Such a planning model could serve as a basis for planned changes or gradual long-range planning for the implementation of the special education model as an integrated set of functions in a global educational system. This part of the study is more related to administrative operations and constitute with the systems conceptual model of special education, an essay to establish a new perspective in the administration of both regular and special education.

SIGNIFICANCE OF THE STUDY

In an exploratory study on the elaboration of a model for comparative analysis of special education organization among different educational systems, Labrogère (1974) concluded that efforts should be made to develop other tools of comparison more comprehensive than the various structural typologies. Structural typologies refer to the hierarchy of special education practices in terms of their location in the educational system. Such hierarchies oftenly use the two extremes of a continuum; the segregated institution on one side, and the regular class placement on the other side. All other services are to be found in between these two extremes. This structural classification is thought to be a somewhat comprehensive model for the analysis of all possible special education delivery systems. Labrogère's remark is relatively new in the field of special education; it illustrates the need for a new approach involved in the functional analysis of organization of special education. A functional approach should focus more on the relationship among the components as missions of special education and of those of regular education than on the location of these services on a structural continuum.

This study was concerned with the development of a systems conceptual model of special education. It was an attempt to use a functional rather than a structural approach. The model developed in this study was elaborated on the basis of an analysis of special education components in terms of their functional significance rather than their structural location in the educational system. Such an approach tends to study the functional significance of special and regular education components as missions of a global educational system. It constitutes a different perspective than the study of special education as a self-contained delivery system.

There are two different ways in which this study is of significance. First of all, the methodology used in this study may serve to identify a new conceptual framework for the study of special education; secondly, the model itself may serve as a new mode of special education administration.

The methodology adopted in this study constitutes an attempt to use systems theory as an interpretative model, or a "model for", for the elaboration of a conceptual model of special education. General Systems Theory was hypothesized to lead to a functional specification of the components of special education. The basic assumption was that systems theory, as an interpretative model, could lead to the identification of specific functions or missions related to special and regular education components in a global educational system. This specific mission analysis could give a different structural perspective and generate a new type of organization. It was assumed that a functional analysis of special and regular education in terms of educational missions could lead to an integrative perspective of such missions among what could be thought as regular education services.

The conceptual model of special education developed in this study represents an attempt to actualize the integration of special education as functional components or missions of regular education. It is an essay to elaborate new modes of special education organization based on a desegregating principle. The conceptual model developed in this study is dedicated to the principle of non-segregative practice in special education and can be seen as an effort to give new opportunities for the implementation of such a principle.

Finally the conceptual model of special education could be seen as a conceptual framework for the organization and administration of special education services in an educational system, therefore it could be used as a logical support for educational planning.

A planning model was also identified in this study. Such a model was adopted in order to facilitate the implementation of the special education model on long-range planned changes in an educational system. This part of the study constituted an effort to operationalize the conceptual model of special education and to identify some administrative practices related to this operation.

NATURE OF THE STUDY

Since this study is principally concerned with the elaboration of a conceptual model of special education, it can be classified as of a theoretical and fundamental nature according to Tremblay's classification of research designs.

> La recherche fondamentale théorique s'inspire davantage du modèle logico-déductif... Ce genre de recherche fondamentale se caractérise toujours

> par un effort de conceptualisation. Sa préoccupation est de préciser les concepts et de favoriser l'avancement théorique. (Tremblay, 1968, p. 57).

For Tremblay the fundamental theoretical type of research is based on a deductive model of explanation. Explanation can be understood as "the discovery of like in unlike, of identity in difference" (Schlick, 1949, p. 18). For Kaplan (1964, p. 339), "To explain something is to exhibit it as a special case of what is known in general". Since deduction is a mode of explanation, it can be seen as reference of particular instances to general principles. A deductive explanation is to show how what is being explained can be deducted from more general considerations. In this study the deductive explanation will be based on the use of General Systems Theory as a general conceptual framework and as an interpretative model.

For Kaplan (1964, p. 275) an interpretative model "allows us to use what we know of one subject-matter to arrive at hypotheses concerning another subject-matter structurally similar to the first". The use of General Systems Theory as a source of an interpretative model is based on the assumption that education shows the structural similarities with open systems. The intention to adopt a functional approach to special education is also related to the use of Systems Theory. Systems are thought to be purposive and their structure is derived from purposive functional links between components. Therefore Systems Theory is related to a functional approach and is used in this study as a source of an interpretative model for the deduction of a conceptual model of special education.

For Tremblay (1968) a fundamental and theoretical study is characterized by its conceptualization efforts. This essay represents an effort to conceptualize special education according to a system perspective. Also this type of research is preoccupied with concept specification. For Kaplan (1964) there are terms which require for specification of their meaning not one sentential context but the context of the whole set of sentences in which they appear. Conceptual specification of special education in terms of concept meanings in a systemic interpretation of special education corresponds to Kaplan's views on meaning specification. Systems Theory is seen therefore as a "set of sentences" in apostulational form and special education concepts could find specific meanings in such a set.

"The value of theory is not only in the explanations it was constructed to provide but also in its unanticipated consequences, and these in turn enrich meanings in an unforeseen way". (Kaplan, 1964, p. 65). Systems Theory has not been used before as an interpretative model for comprehensive modelizing of special education. The general hypothesis of this study is that Systems Theory can bring a new conceptual order in the organization of special education on the basis of functional integration of special education within a global educational system.

General Systems Theory used as an interpretative model or as a "model for" is primarily constituted of a set of concepts integrated in a theoretical framework. The deductive approach based on such a "model for" is also presented on a conceptual level. Therefore the "model of" deduced is qualified as a systems conceptual model of special education.

The systemic orientation of the model is related to the conceptual framework from which deductions are made, the framework being General Systems Theory. The conceptual nature of the model is related to its level of abstraction and the use of symbolic order. A concept is a term or a symbol that shows an intellectual representation of some aspect of reality. This study is oriented toward the elaboration of a model that is different from a theory as specified by Van Dalen (1973):

> Both theories and models are conceptual schemas that explain the relationships of the variables under consideration. But models are analogics (this thing is like that thing) and therefore can tolerate some facts that are not in accord with the real phenomena. A theory, on

> the other hand, is supposed to describe the facts and relationships that exist, and any facts that are not compatible with the theory invalidate the theory. In summary, some scholars argue that models are judged by their usefulness and theories by their truthfulness; models are not theories but tools that are used as a basis for formal and rigorous theory construction. (Van Dalen, 1973, p. 54).

The systems conceptual model developed in this study is related to special education. In some way it includes or describes elements observable in actual reality, but it also specifies or prescribes what ought to be according to the analysis of analogies between open systems and special education components.

The research design used in this report is related to the theoretical nature of the study. It is based on the systematic use of a systemic interpretative model from which conceptualizations of special education organization are deduced. Such a design is significant on the basis of the logical consistency and rigor of the deductive use of the interpretative model.

The development of a systems conceptual model of special education can lead to the evolution of knowledge in the field of special education administration and as such follows a fundamental or theoretical pattern. The general intention of this study could also be presented as an attempt to meet applied needs; that is, the need for a solution to the problem of segregational practices in educational systems toward exceptional children.

The elaboration of a systems conceptual model of special education therefore follows a theoretical path and the provision for a planning process which could facilitate the implementation of the model is oriented toward solving the problems caused by segregative practice in special education. These two dimensions of the study, are intended to give new perspectives in research and practice in applied educational administration under a scheme of integration of special education services among regular education delivery systems.

OVERVIEW

The thesis is composed of seven chapters. Chapter I consists of a general introduction to the nature and the design of the study. Chapter II deals with the first sub-problem, the elaboration of a typology of trends in special education practices. Chapter III is concerned with the description of the systems interpretative model by a review of systems concepts. Chapter IV deals with the elaboration of the conceptual model of special education. This chapter constitutes the basic development of this study. It is a discussion based on logico-deductive exploration of special education components and dynamics under a systemic interpretation. Chapter V deals with the integration of the special education model within a comprehensive educational planning strategy. This chapter is dedicated to the applied dimension of this study. It is oriented toward the planned implementation of the conceptual model of special education. Chapter VI is concerned with the use of the model as specified in the planning strategy in the analysis of special education delivery systems of different countries. The specification of the model under a comprehensive educational planning strategy has given some indicators of the degree of integrative versus segregative trends in special education. These indicators are used in Chapter VI as observation criteria for special education delivery systems comparisons. Finally, Chapter VII presents the general conclusions of this study and outlines possible further developments.

Chapter II

TRENDS IN SPECIAL EDUCATION

"What is special education?" This question has been asked often in recent years by lay and professional people. Philosophically, one can answer this question by saying that special education is as old as man himself. It is linked to the reactions of men, when they became aware of those whose appearance and behavior differed from the characteristics or expectations of the majority. In a more pragmatic way, one can attempt to answer the question by saying that special education is a set of facilities and programs which are provided by a society, for those members who have special needs that cannot be met in the regular educational system. From one answer to the other there is a great historical evolution. Neither of these definitions of special education is comprehensive enough to give useful insights into its real nature. In order to understand the reality of special education one should analyse all elements of an evolutionary nature which have contributed to the development of the current version of special education.

Many writers in the field have started their communication by looking back to the past and elaborating a "history of special education", (Dunn, 1968; Hewett and Forness, 1974; Segal, 1967; Wolfensberger, 1972). The major similarity of these analyses is that they all tend to indicate chronologically how societies, from generation to generation, have accorded varied treatment to the exceptional individual. These studies have a declared purpose of providing a better understanding of current practices in special education from a historical perspective. From a logical point of view, these works come to a point where the authors introduce their own way of thinking about special education, and the historical background gives insights into the value of a so called "new approach" in the treatment of exceptional children.

This chapter focuses on a historical analysis of special education. It is assumed that from the analysis of past practices it is possible to identify the roots of current practices. The aim is the identification of significant assumptions that have generated models of facilities organization or modes of services in special education. Since this study is concerned with the elaboration of a model for special education, it is important to determine the significant elements that have to be taken into account in the model without neglecting past practices as factors of evolution.

Hewett and Forness (1974) in their historical analysis, have elaborated a set of "Historical Determiners of the

Treatment of the Handicapped". Four headings were used by these authors: Survival, Superstition, Science and Service. Each heading was discussed in terms of trends that constituted their practical aspects; Table 1 is presented in their report. The major feature of their historical analysis is the attempt to show a pendulum movement in the evolution of special education. As they point out:

> History does not record an orderly progression of positive trends in relation to the treatment of individuals who were different, but rather it displays a highly variable and widely discrepant range of trends during most historical periods. (Hewett and Forness, 1974, p. 10).

Table 1

Historical Determiners of the Treatment of the Handicapped (Hewett and Forness, 1974, p. 10)

Survival	Superstition	Science	Service
Harsh Physical Environment	Sacrifice	Natural Exploration	Exploitation
	Witchburning		Human Treatment
Infanticide	Torture	Categorization	Custodial Care
Eugenics	Trephining	Objective Study	Education
Harsh Treatment	Demonology	Phychological Theory	Societal Acceptance
Exile	Worship	Mental Measurement	
		Research	

This conclusion suggests that societal acceptance of the exceptional student might be achieved, but that segregative categories of exceptionality will still prevail. Each of these approaches are in some way contradictory because of the lack of social awareness about the assumptions and basic beliefs that are involved.

Irrational as well as rational beliefs have been the basis of organized actions for the handicapped. Looking closely at Table 1, it is possible to assume that the determiners of Science and Service differ from the determiners of Survival and Superstition, in terms of the nature of underlying beliefs. The evolution of scientific knowledge had the effect of elaborating more rational and well-founded beliefs than previous "common sense" approaches (survival and superstition). At a higher conceptual level, beliefs can be seen as elements of ideology. According to Wolfensberger (1972, p. 7), ideologies are "... a combination of beliefs, attitudes, and interpretation of reality that are derived from one's experiences, one's knowledge of what are presumed to be facts, and above all, one's values." Therefore, ideologically integrated beliefs tend to prescribe the type of treatment to be offered to the handicapped. In human management, as is the case of special education, well expressed ideologies are referred to as a human management model. Human management models describe and also prescribe the design and operation of management facilities such as services for the handicapped.

An ideological classification of the various types of special education services developed during the evolutionary period could then be the source of a certain typology of models of human management. Because of this study's interest in a organizational model of special education, the ideological classification schema appears to be a good base for discriminating among different human management or organizational models of special education.

In his historical analysis of the treatment accorded to the mentally retarded, Wolfensberger (1972) has also used an ideological classification schema. He identified four categories of ideology: destruction of deviant individuals, segregation, reversal of the condition, and prevention. The first ideological determiner defined by Wolfensberger appears to be similar to Hewett's survival and superstition determiners. The three other of Wolfensberger's categories though, tend to be more comprehensive than the science and service determiners because their ideological nature is at a higher generalization level than strict historical trends. In order to illustrate this superiority of an ideological type of classification compared to a historical type, the Education approach in Hewett's and Forness' Service determiner can be analysed in terms of practical implications even though the reasons for the establishment of such an approach are of an ideological nature. All Hewett's and Forness' approaches then would have to be analysed separately in terms of their ideological nature. Using an ideological type of classification, all approaches are studied under ideological similarities. Finally a heading such as Segregation appears to be more action oriented than Services or Science and facilitates the practical evaluation of approaches in terms of beliefs, effects and criticism due to an evolution of knowledge in the field.

The systemic orientation of this study is also prescriptive on the basis of ideological typology. Service systems are moving toward goal achievement; a typology of special education trends should be based on a goal-oriented classification. Goals can be thought as being inscribed in ideological trends and therefore ideologies can be used as general criteria for typology development.

This historical analysis of special education will borrow from Wolfensberger's study three of his ideological categories and will attempt to relate to these ideologies the services approach that they have generated as human management models. The classification of ideologies reflects more a pendulum effect than a strict chronological development. Even though the segregation ideology appeared before the prevention ideology, the pendulum movement does not imply that segregation is definitively replaced by this "newest" ideology. The pendulum movement also illustrates the fact that several approaches and beliefs are prevalent in current practice even if shifts have been tentatively made from the ideology that they represent. For example, some beliefs of the medical apprpach can be seen as the basis of the instructional approach while they are categorically rejected by the mainstreaming proponents. Table 2 represents the three ideological determiners with their definitions; related to each of these are the service approaches that will be discussed in this analysis. Finally, the historical analysis will indicate the significance of this attempt to elaborate a conceptual model in terms of the evolution of special education.

Table 2

Ideological Determiners of Special Education Services

Determiners	Services approach
SEGREGATION (The exclusion of the exceptional individual from a regular process of development or of a regular environment)	MEDICAL CATEGORICAL INSTITUTIONAL
REVERSAL OF THE CONDITIONS OF EXCEPTIONALITY (Treatment of the individual for adaptation and adjustment to the environment)	INTEGRATION NORMALIZATION MAINSTREAMING
PREVENTION (Predetermined adapted conditions of transaction between the individual and the environment)	INSTRUCTIONAL SOCIAL-PSYCHOLOGICAL

SEGREGATION

One of the most commonly stated goals of special education programs is meeting the needs of exceptional children whose needs cannot be adequately met in regular programs (Baker, 1959; Cruickshank and Johnson, 1958; Dunn, 1968; Jordan, 1962; Kirk, 1962). This commonly stated goal subscribes to a particular view of the exceptional persons and of the process of meeting their needs. Because the exceptional student has special needs, he is seen as different from the "normal" one and, therefore, his needs cannot be met in regular programs. Two questions arise from this statement: What are those special needs? Where and how can they be met?

The segregation ideology tends to regard special needs as derivates of some kind of disease in the patient (the exceptional student). Much has been written about the medical model which generally implies the description of an exceptional person as a "sick patient" who after "diagnosis" is given "treatment" or "therapy" for his "disease" in a "clinic" or "hospital" by "doctors" or a "therapist", all this hopefully leading to a "cure". This has been referred to, by sociologists, as the "sick role". (Bélanger, 1970; Celdic Report, 1970; Deno, 1970; Wolfensberger, 1972). Therefore, special education has developed special treatment for particular conditions of exceptionality.

Related to this medical approach is the categorical approach. This aspect of the evolution in special education was highlighted by a more thorough knowledge of handicapping conditions. Major emphasis has been placed on the elaboration of an extensive body of knowledge concerned with the conditions of exceptionality. This preoccupation has given powerful insights into the special needs but has also brought as a side effect, a tendency to stereotype these conditions under categories or labels. Under this approach, considerable emphasis was placed on etiology, diagnosis and classification. This practice has given birth to the well-described categorical approach in special education (Forness, 1974; Lilly, 1971; Reynolds and Balow, 1972).

By answering the question concerning where can we discover the special needs of the exceptional individual, it is possible to identify a third type of services approach in the segregation ideology, namely, the institutional approach. This approach differs from the two previous ones by focusing primarily on the environment or locus of treatment in contrast to the medical and categorical approaches which are oriented mainly toward the conditions of exceptionality and types of treatment. The three services approaches are related to the segregation ideology since they all prescribe treatment of the exceptional person by exclusion from a regular process of development or from a regular environment; however, they do have different bases for such prescription and translate the ideology differently.

Each of these services approaches will be analysed in terms of their basic beliefs or assumptions and by the effect they have had on the organization of special education. Finally, the major criticisms addressed to them will be reviewed.

The medical approach

Basic beliefs. There has been greater involvement in the search for better knowledge of handicapping conditions by specialists in the medical and psychological fields than by educators. In addition, general education has benefited mostly, until recently, from psychological studies. Child development studies, learning theories and socialization processes have been the points of involvement for psychologists. One effect of this evolution of knowledge has been, in terms of special education, the elaboration of identifiable handicaps or conditions of exceptionality. The exceptionalities were based on broad "diagnosis" dealing with medical and psychological variables. For example, a diagnosis of mental retardation based on I.Q. tests has had implications for knowledge about the emotional life and physical development of the individual. This was the integration of a body of knowledge on mental retardation developed from different studies. These studies established the pathological differences of the exceptional person from the so-called normal person. This conceptualization has led to the identification of pathological conditions in every type of exceptionality. Therefore, the association of pathology and sickness has led to the use of a medical type of treatment of the handicapped in special education. A corollary of this perception of the handicapped is to be found in the belief that such a medical type of treatment was necessary before there should be any attempt to bring the individual to a level of achievement or adaptation.

To summarize, the medical approach was based on the assumption that the cause of exceptionality was within the individual as a sort of pathological condition, necessitating treatment before the exceptional person could be considered normal and left in the regular services system.

Effects. The medical approach with its specific assumptions has had great impact on special education. It has given to the field a large body of information on the nature of exceptionalities, thus identifying the conditions of individuals who have special needs to be satisfied. The growing scientific background of a medical and a psychological nature has permitted the treatment of individuals previously left to themselves. It has equipped special educators with such information as the I.Q. classification of mental retardation (discriminating different levels of deficiency), the prevalence of mental illness in several handicapping conditions, the nature of emotional disorders, learning difficulties, and neurological data about sensorial handicaps. These types of data have served as the "source" of descriptors of the special needs of exceptional persons. As has been indicated by Reynolds and Balow (1972), these variables were seen by special educators as indicators of educational problems; therefore, great emphasis was placed on training special educators through programs geared to the acquisition of the best knowledge possible about the pathological conditions of exceptionality.

The medical approach has also generated types of interaction or specific role patterns in the treatment process. The fact is that the major body of knowledge prevalent in special education was based on "medical" descriptors of the exceptionality and a "medical" role pattern was established, as described by Wolfensberger (1972). The process was based on a "diagnosis" prescribing a "treatment" and using a "therapist" in order to "cure" the "patient". The emphasis was on a "patient-therapist" relationship in order to treat the handicap for reintegration into normal life. Treatments or therapies were developed for every type of exceptionality. Many authors have applied to this approach the conceptual framework of medical sociology (Bélanger, 1970; Sodhi, 1972; Rosenthal and Jacobson, 1968). More specifically, studies on the nature of reciprocal expectation in a patient-therapist relationship have indicated the level of stereotypes involved in the illness expectation. The patient is consulted for confirmation of his illness; the therapist reinforces this perception of self by his diagnosis. In fact, the same may be true for exceptionalities. After making a diagnosis of the condition the therapist expects the exceptional person to act as an "exceptional" person (Bélanger, 1970). When the process of psycho-medical-diagnosis was established and the individual declared as exceptional with emphasis on a specific handicap, a placement was made for treatment and the diagnosis process was thought to be completed; institutional roles were established, and the treatment went into action.

The third effect also derives closely from the two first ones. Wolfensberger (1972) and more specifically Jacobson and Rosenthal (1968) have described the tendency in the medical approach to focus on the deficiencies of the handicapping conditions rather than on the competencies. Being geared to the illness of the organism has the effect of illustrating the deficiencies or problematic disfunctions. Special educators were placed in a framework where they had to decrease their teaching-learning activities in order to deal exclusively with the deficiencies of their students. Deficiencies or difficulties were the focus of intervention, therefore generating the expectation of lower achievement as analysed by Jacobson and

Rosenthal (1968). A trainable mentally retarded child could not learn mathematics, the diagnosis created what may be artificial limits in the expectation patterns. This trend went so far as excluding the exceptional person from access to regular or normal developmental activities. Finally, the medical approach gave the scientific bases for the categorical and institutional approach while defending or proclaiming the segregation ideology.

Criticisms. A survey of the major criticism addressed to the medical model shows several attacks on both the assumptions of the approach as well as the negative aspects of its effects. These criticisms can be summarized as follow:

1. This view of the exceptional persons had the undesirable effect of treating the individuals in homogeneous clusters. For instance, all educable mentally retarded were thought to be alike and in need of one kind of treatment which was different from that suitable for other types of exceptionalities (Forness, 1974; Reynolds and Balow, 1972).

2. The knowledge of exceptionalities was related to psycho-medical variables which have no direct educational relevance (Forness, 1974, Deno, 1970; Dunn, 1968; Kidd, 1968; Lord, 1967; Reynolds and Balow, 1972; Rogow and David, 1972; Sodhi, 1972).

3. The treatment categories by handicapping conditions generated a set of special educational expectations that tended to negate the competencies of the individual by focusing on his deficiencies (Bélanger, 1970; Rosenthal and Jacobson, 1968; Wolfensberger, 1972).

4. The pathological view of the exceptional individual located the cause of exceptionality within the individual to the total neglect of the responsibility that could be assigned to the social environment as a source of exceptionality (Deno, 1972; Bélanger, 1970; Giroux, 1971).

5. Finally, a major criticism of the medical approach was presented by Reynolds and Balow (1972) in their treatment of Zubin's categories of diagnosis. Their discussion is an attempt to show that if the basic tool of the medical approach is a psycho-medical-diagnosis; the purpose of this process has no educational relevance. Their analysis is summarized in Table 3.

The categorical approach

The second approach under the segregation ideology is, in some respects, difficult to separate from the previous medical approach. The psycho-medical knowledge of exceptionalities has given birth to a perception of the handicapped individual. The categorical approach also shares this view and can be understood by taking into consideration what has been described in the medical approach. In fact, the beliefs, effects, and elements of criticism described in that approach are also relevant to the categorical approach. Although the categorical approach can be seen as a second generation of the medical model, it makes its own contribution to the segregation ideology.

Basic beliefs. The basic assumption of the categorical approach is a derivate of the tendency, in the medical approach, to consider handicapping conditions as homogeneous. This homogeneous assumption had the effect of considering, for example, all educable mentally retarted children to be alike and gave no attention to individual differences.

Table 3

The Analyses of the Educational Relevance of Some Diagnosis Purposes (compiled from Reynolds and Balow, 1972)

Zubin's Diagnosis Purposes	The Authors' Remarks
Search for etiology	- Educational planning should not be concerned with causes but with learning patterns.
Make a prognosis	- Educators are employed to influence children's learning not to predict it.
Select a therapy	- Even if that is an important purpose of special education the type of treatment to be offered has to be positive thus not seen as a cure.

Exceptionalities were not only thought of as homogeneous within the same pathological condition, and therefore being different from normality, but they were also thought to be stable. If the handicapping conditions were stable, they could not be changed totally, and the individual was treated to accept having to live with them. This stability generated a permanent typology for the purpose of labeling the individuals with categories of exceptionality for treatment purposes. This grouping process was as permanent as was the perception of the exceptionality characteristic. Another characteristic of the categorical approach was that it demanded the expansion of services in order to assist the exceptional individual. In many countries, the exceptional individual was accorded the right to special services. The United Nations (ONU, 1959) established a declaration of rights of exceptional children which proclaimed the necessity of special treatment for them. It was believed that it was morally and socially important to offer special services on a large scale, and it was administratively feasible to organize facilities of treatment by homogeneously stereotyped categories of handicapped. Under such a "categorizing approach", there was one type of treatment for each known type of exceptionality which had to be carried out in one type of environment. Models of special education services were categorically oriented in order to satisfy each special need identified in the stereotypes. The more specific the stereotyped elements, the more specialized were the services to be offered.

Effects and criticisms. The most important consequence of this approach was within the social effects area and was due to its labeling of the individual. Samuel Levine has described the categorization process derived from the categorical approach as follows:

> Society "understands" or conceptualizes the disabled individual in categorical terms. Those attributes which society utilizes for categorizing the disabled we term the defining attributes of the category. Each behavior in the category had a degree of defining value in respect to its predictability to the stereotype. Those behaviors that afford maximal prediction to the category have a high defencies value and are crucial to the stability of the category. Although these categories may be modified in relation to a particular individual to a great degree they represent categorization based on biological resemblances. In a sense, these exceptionalities have a common or shared stimulus function. This leads to certain social destructions and culturally imposed differentiations (Levine, 1961, p. 85).

In this process of categorizing, Dunn (1968) saw a tendency to justify, on the basis of a psycho-medical diagnosis, a destructive "self-fulfilling prophecy" where the individual was influenced to be like the labeling stereotype. These disability labels, then, had great effects on the attitudes and expectations of teachers (Rosenthal and Jacobson, 1968) and on the child's self-image. Also, according to Goffman (1961), the label imposes a stigma upon the individual which marks him for special kinds of interaction and tends to segregate him from those without this stigma. To summarize these consequences, it can be established that a labeling process determines a stable set of expectancies at every level of interaction for the disabled person. He perceives himself as the label identifies him, then his environment expects him to act as predicted by his exceptionality, thus generating a specific mode of interaction. In education, this categorizing generates several problems as summed up by Reynolds and Balow:

> a) There is a tendency to stereotype and to ascribe characteristics of the group to individuals. The practice, crude at best, is frequently in error and prejudicial to the interests of the individuals.
>
> b) The category labels tend to become stigmatic and to be attached indelibly to the individuals, often resulting in scapegoating. Sometimes the child's label becomes an excuse for poor educational programs.
>
> c) People who work with exceptional children may associate the categories with negative expectations and carry them into their relationships with the children and into curriculum planning. A degree of diagnosegenic or prophecy fulfilling inadequacy in the child's development may result.
>
> d) An assumption is made frequently about an easy isomorphism between categorical and educational classifications. For example, it may be assumed that because a child is mentally retarded he should get the "primary life needs" curriculum. (Reynolds and Balow, 1972, p. 357)

Finally, the categorical approach, with its emphasis on "what is wrong with the child" has developed a system of facilities "apart" from the regular education system (Graham, 1962). It has generated a dichotomy between two educational systems - one for the "going well" students and - one for the "going poorly" students and has contributed to the rise of the institutional approach.

Institutional approach

The third approach of the segregation ideology is the most typical approach of the three in terms of its direct practical implications. This approach is concerned with the organization of facilities and is based on all of the assumptions in the medical and categorical models. It provides the best example of the consequences of segregative ideology. The use of the term "institutional" in this analysis characterizes all types of "treatment facilities" that have a segregative pattern. It is involved with all services from public school systems, the state and the private welfare services. In this sense it has a broader definition than is usually the case in the literature, where one encounters only the custodial care pattern.

Basic beliefs. The institutional approach has a specific answer to the question of "Where can we meet the special needs of exceptional individuals?" The answer was in what can be identified as a special environment. Due to the assumed inability of the regular education system to help the exceptional individual, it was thought that a delivery system specialized in terms of the categories of exceptionality ought to be the solution to the problem. All children had the right to educational services but the regular system could not be organized to fulfill such a task. As a result, it was followed by a great involvement in the establishment of services for the exceptional. As several authors have suggested, it was the apogee of special education as it (special education) was charged with this task of providing facilities. The assumption was clear: we had to work for the exceptional child offering him all we could in relation to his conditions. The task was to open as much special service as possible to all exceptional children.

Effects. The major consequence of this approach was that special education was created at the "outskirts" of the educational system. Special schools were opened apart from regular schools. Special classrooms were organized within regular schools, and institutions with custodial care were established. All these locations were typically identified for "special individuals". As a first type of highly organized administrative structure, special education facilities were apart, different, and specifically identifiable.

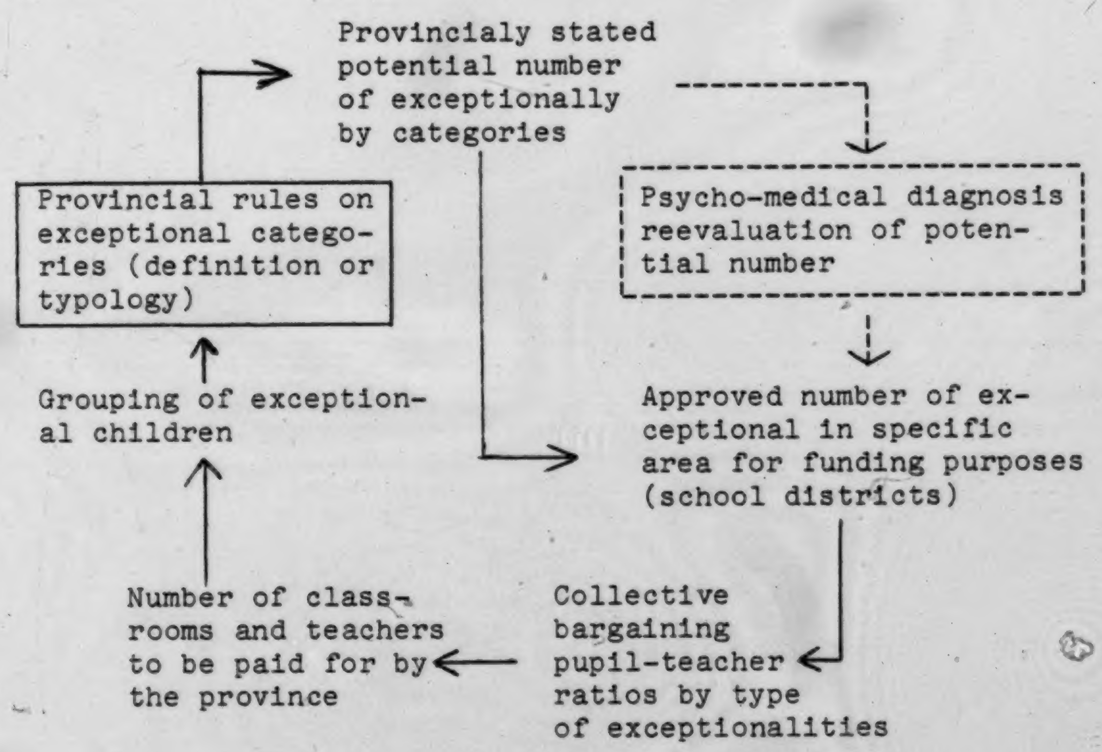
All the stigmas associated with the categorization or labeling of the individual were to be found at the education system level. Labeling an individual has an effect on his interaction with others but separating him for regular educational practices had a double effect: amplifying the stigma on the individual, and, as groups, isolating them from the mainstream of interaction of the educational system. Many special institutions or schools were even constructed outside of the cities; special classrooms had an affinity for basement locations.

Regular education had to be carried on; normal children had to learn in classrooms where they could not be affected by slow learners or emotionally disturbed students. The institutional approach has resulted in a sorting system with a double purpose: (1) to be able to offer special services to all children in need, and (2) to empty the regular school of the irregular learners (Kirp, 1974).

Another effect of the institutional approach relates to the administrative communication network and administrative process which it implies. Since the institutional approach necessitates a tracking system to achieve comprehensive grouping for treatment, a terminology derived from the categorical approach had to be included in the system. Labels are the descriptors of grouping process; they are also the basis for the system of funding. All administrative communications in special education systems are based on this approach. To illustrate this pattern, Figure 1 shows the circular mode of a categorically based administration network as used in the institutional model. The network in Figure 1 illustrates the specialization of special education as observed in the Province of Quebec. Each defined category of exceptional children is assigned an expectation of a certain percentage of cases among a population of school-aged students. Then, from this figure, it is possible to establish the real number of each type of exceptional student to be found in a specific school area. This constitutes the base for authorized and fundable expenditures. When associated with the various working agreements, as with teachers' unions, about the specific pupil-teacher ratio by types of exceptionalities, it determines the funds available. From this process, it becomes possible to establish the number of classrooms authorized and the amount of expenditures per capita. Finally, classroom grouping procedures follow in order to implement the organization of special education. The only modification possible in this process is when a specific area or school district can prove, on the basis of formal psycho-medical diagnosis, that the percentage of exceptional children in a specific category is higher than predicted. In a special education system based on the type of administrative pattern described in Figure 1, it is possible to find all the special facilities listed in Table 4. This is the case for the Province of Quebec. Table 4 is an example of the extent of specialization current in special education.

Figure 1

The Categorical Administrative Network


Provincialy stated potential number of exceptionally by categories
Provincial rules on exceptional categories (definition or typology)
Psycho-medical diagnosis reevaluation of potential number
Grouping of exceptional children
Approved number of exceptional in specific area for funding purposes (school districts)
Number of classrooms and teachers to be paid for by the province
Collective bargaining pupil-teacher ratios by type of exceptionalities

--- This part of the process is used when locally determined numbers of exceptional individuals by categories exceeds the Provincial potential numbers.

Table 4

Potential Numbers of Exceptionalities
(Province of Quebec)

	Manifestations spécifiques	Taux d'incidence (en %)
1.	La débilité mentale légère	2.5%
2.	La débilité mentale moyenne	.5%
3.	L'état d'handicap moteur simple, de diminution physique et l'épilepsie	.5%
4.	L'infirmité motrice cérébrale	.175%
5.	La surdité	.35%
6.	La demi-surdité	.5%
7.	La cécité	.015%
8.	La demi-voyance	.1%
9.	Les situations d'handicaps multiples	.25%
10.	Les troubles spécifiques de la parole	3.5%
11.	Les troubles d'apprentissage	3.5%
12.	Les perturbations affectives graves	1.0%
13.	Les perturbations affectives légères	2.0%

This specialization process has the attribute of highly differentiating individuals and facilities in order to achieve the aim of satisfying the needs of exceptional children.

Criticisms. The institutional approach which has invested special education with such a specific task, has been accused by Dunn (1968) of having over-specialized the field. In fact, the administrative easiness of separating the function of special services, as is the case in this approach, has greatly contributed to the acceptance of the medical and categorical models. Therefore, all previous criticisms of these approaches apply to the institutional approach as well. It follows that special education under such a model was guilty of helping the child with his specific needs, due to his handicapping condition, without treating him as a global entity. In other words, it served the child in terms of the pathological dimensions and not in terms of the overall growth pattern that characterized everyone (Lord, 1967). Another result of this approach was the segregation of the individual from the regular school system. Instead of developing integrated facilities or a regular pattern of needs-satisfaction, institutionalism developed an isolated intervention process. This had the effect of taking the responsibility of helping the exceptional child away from the regular education system and invested special education with a legitimized "outside" or in some way marginal function (Johnson, 1969). This evolution created a gap between special and regular education goals, and often established a set of negative attitudes among educators concerning the value of these goals. To some the situation seemed to consist of (1) regular education with crowded classrooms and with more or less rigid programs, and of (2) special education with smaller groups and not so rigid programs. Therefore, a general attitude developed which had the consequence of placing in the special education class all the non-succeeders of the regular system. Furthermore, it has been noted that approximately 68 to 75 percent of the children were unfairly placed in special education (Sodhi, 1972).

The most accepted criticism of the institutional approach is attributable to Dunn (1968) who exhorted special educators to stop being pressured into a continuing and expanding special education programs (special classes) that are known to be undesirable for many of the children they are dedicated to serve. He further claimed that "removing a child from the regular grades for special education probably contributes significantly to his feelings of inferiority and problems of acceptance". After carefully reviewing the evidence presented by Dunn, MacMillan (1971) added his own interpretation and concluded that "the larger issue and one which if debated and researched could prove fruitful is: to what extent and under what circumstances can a wider range of individual differences be accommodated in the regular class than is presently the case?"

This widely endorsed remark by MacMillan can be seen as the type of argument that made the transition possible from segregative ideologies to the next ideology to be analysed in this study, namely, the reversal of the condition ideology.

REVERSAL OF THE CONDITION

The second ideological determiner identified in Table 2 is the reversal of the condition of exceptionality. This ideology is involved in the treatment of the individual to increase adaptation and to consider this increase in terms of the adjustment to the treatment environment. Before analysing the specific approaches included in this ideology, it is important to determine how it differs from the segregation ideology.

The reversal of the condition of exceptionality ideology is in some ways a derivate from the segregation ideology; however, it also is a major departure from several assumptions and practices of segregation. The reversal of the condition ideology maintains the "special needs" view of the exceptional child. It also endorses the social obligation to help these who are exceptional, and it prescribes treatment and facilities for them. But it differs from the segregation ideology in terms of its basic purposes. The treatment under this second ideology is seen as attempting to increase the adaptation of the exceptional student to the regular environment. Its purposes are not to "cure" the exceptional individual but to facilitate his adaptation to normal, social and educational interactions. Also, it represents the beginning of a major shift from a view of the exceptional child which places the cause of exceptionality within the individual to the belief that exceptionality is due to a mismatch between the needs of an individual and the nature of the educational system. Therefore, the "reversal of the condition" ideology prescribes facilities presenting maximum interaction with the "normal" individual in order to achieve adaptive behavior. As a result, it also places major emphasis on minimizing the stigma of exceptionality; this assists in the interaction process and questions the inability of the regular educational system to adjust to the needs of exceptional children.

In some respects this second ideology represents an answer to the criticisms directed at the segregation ideology and its approaches. The three approaches under the "reversal of the condition" ideology are the integration approach, the normalization approach, and the mainstreaming approach. They are closely related and differ only in the sophistication of their conceptual frameworks. That is to say, they all share the same basic assumption but differ in the complexity of the elements that they identify as facilitators of integration of the exceptional child into the regular education system. Being relatively recent (beginning of the seventies), these approaches are perhaps not fully implemented and therefore their range of potential consequences has not been fully identified. Nevertheless, their current state in a full adoption process does permit some analysis.

The integration approach

The integration approach is identified as the first attempt to implement the "reversal of the condition" ideology. As a human management model, it is involved in responding to MacMillan's (1971) argument for attempting to accommodate, as much as possible, individual differences in the regular class and, therefore, establishes alternatives to special placement segregation classes.

Basic beliefs. As has been indicated, this approach is based on the assumption that exceptional children would achieve a better development or self-realization through interacting with normal children. It is believed that the regular education system should be adjusted to facilitate participation by exceptional students and that a better knowledge of alternative learning conditions or program organization was necessary to satisfy the special needs of exceptional children. Finally, this approach subscribes to the assumption that exceptionality has a two level disfunction, individual and environmental, and as such could be seen as non-permanent. The exceptional condition was then a phenomenon due, in part, to the nature of the educational system and, secondly, to the special needs of the child. If the two elements could be adjusted then reciprocal adaptation could be achieved, therefore confirming the temporary nature of the exceptionality.

Effects. As a first consequence of this approach, Forness (1974, p. 59) indicated that "administrative emphasis began to shift from categorical labels to categorical needs". Categorical needs were to be identified, and in educationally relevant categories. The Gallagher (1974) and Giroux (1970) studies are examples of this type of involvement. Gallagher identified, in an attempt to indicate what is special in special education, the extent of program modification by type of exceptionality. Table 5 from the Gallagher study, divides the program modification into three major categories: content (what is taught), pedagogy (how it is taught), and learning environment (where it is taught). These modifications apply to the regular programs.

Table 5

Gallagher (1974) Interpretation of the Speciality of Special Education

XX - Major change
X - Minor change

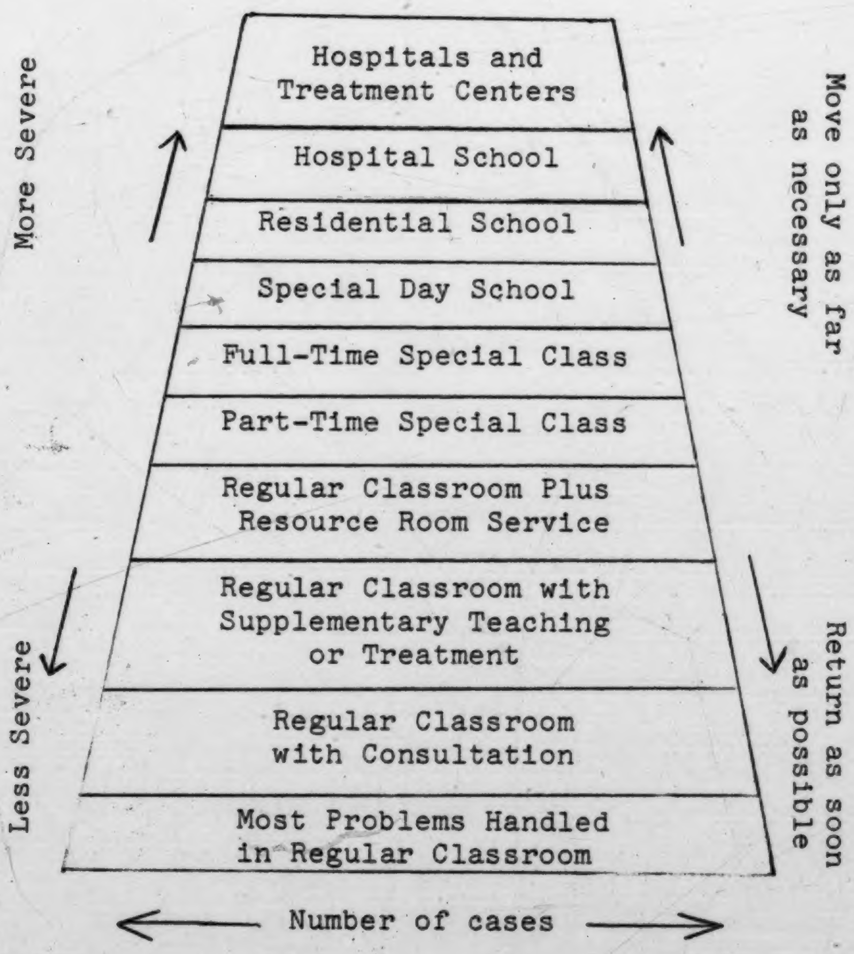
	PROGRAM MODIFICATION		
	Content (What is taught)	Pedagogy (How it is taught)	Learning Environment (Where it is taught)
SEVERE-CHRONIC (needed for all of school career)			
Moderate and severe mental retardation	XX	XX	XX
Deafness and severe hearing loss	XX	XX	XX
Blindness and severe visual impairment	X	XX	X
Autism and schizophrenia	XX	XX	XX
Orthopedically handicapped	--	X	XX
Severe communication problems (cleft palate, cerebral palsy)	--	XX	X
TRANSITIONAL (needs may be met by limited, intensive treatment)			
Educable retarded	XX	XX	XX
Hard of hearing	X	XX	X
Partially disturbed	--	X	X
Emotionally disturbed	X	X	X
Articulation problems	--	X	X
Specific learning disabilities	XX	XX	X
Gifted	X	X	X

This type of contribution to the "reversal of the condition" ideology is an attempt to illustrate the possibilities, within the regular education system, of meeting different levels of special needs. Such an analysis holds some promise for bringing special education closer to regular education. New models of placement for exceptional students, related to this attempt, might achieve the desired integration. Placement models, then, could be forms of a facilitative educational program in which a continuum of instructional services and learning environments is provided. The objective of each unit on the continuum being the achievement of regular class placement whenever the pupil has acquired the skills and behaviors necessary for successful progress within that environment. Another effect of this approach is to focus mainly on the learning environment, since it was the most criticized element of the segregation ideology. Several authors have elaborated alternative group placement models in order to include as much interaction as possible with "normal" individuals (Deno, 1970; Lilly, 1970; Gallagher, 1972; Reynolds, 1962; Willenberg, 1967). Figure 2 represents Reynolds's hierarchy of special education programs.

The features of Reynolds's framework indicate changes at different levels of the hierarchy. From the bottom to the top of the chart, the following progressions can be observed:

Figure 2

Reynolds's (1962) Hierarchy of Special Education Program


Hospitals and Treatment Centers
Hospital School
Residential School
Special Day School
Full-Time Special Class
Part-Time Special Class
Regular Classroom Plus Resource Room Service
Regular Classroom with Supplementary Teaching or Treatment
Regular Classroom with Consultation
Most Problems Handled in Regular Classroom
More Severe
Less Severe
Move only as far as necessary
Return as soon as possible
Number of cases

1. The problems of children placed in programs tend to become more severe or more complex.

2. Programs tend to become more expensive.

3. Responsibility for administration of programs shifts from school authorities to health, welfare, or correction authorities.

4. Children are more separated from ordinary school and home life.

5. Demands for highly specialized personnel increase.

6. Parent and general public understanding of programs decreases.

A discussion of the type of studies represented by those of Gallagher and Reynolds, has presented the essentials of the integration approach. Although another factor ought to be mentioned, Reynolds's chart includes at a certain level the use of a resource room as a treatment facility in the service continuum. As such, this type of grouping can be closely related to integration as a specific innovation. The resource room alternative is seen as a powerful integrative, therefore desegregating, mechanism almost to the point where it was sometimes treated as being "The" integration mechanism so that if such a facility was offered the system was declared to be integrated (Smith and Arkans, 1974).

Finally, another consequence which can be regarded as an abuse of the integration approach was the extreme desegregation of special education. Since segregation was condemned, several educational systems moved all children to regular education pretending to follow the integration movement. By doing so they have tended to ignore the special needs of the child.

Criticisms. Several authors have seen this first reaction to segregation as a very economical administrative solution (Fumegalli, 1973; Giroux, 1972; St-Jacques, 1972). This was a questionning of the real purposes behind such an innovation. The criticisms were directed at the highly administrative nature of this approach which left aside the socio-psychological reality of the interaction to the "good nature of man" assumption. The critics proposed that integration ought to be more social than administrative (St-Jacques, 1972).

At another level, Papanikou (1974) accused models such as Reynolds's framework of being restrictive. For Papanikou "it seems crucial that, whenever possible, a heterogeneous interaction of children occurs at all levels of the continuum". He has also identified other weaknesses of such models:

> A weakness of other models is their attempt to unify all special services under one umbrella. Administrative attempts to pull together disparate

> special education programs in a unified way result in arrangements which are nothing more than a patchwork of still unrelated professional specialities. These consultants and resource rooms are brought under the same mantle as tutors, guidance and counseling services, special classes and residential treatment centers. This "cascade system of special education" leads to discontinuity as a student passes from one separate service entity to the next. This discontinuity also reflects extreme disagreement regarding objectives and methods as seen by the different professional specialities." (Papanikou, 1974, p. 546.).

Finally, the integration approach cannot be seen as a totally de-labeling approach. The continuum framework has been implemented with the same labeling administrative networks as was the case in the institutional approach. In this way, the integration approach was a small attempt to de-specialize special education and to eliminate the over-stigmatizing process.

The normalization approach

The normalization approach starts where the integration approach stops. That is to say, this second approach in the reversal of the condition ideology is merely concerned with the top of the scale of facilities described in the integration administrative framework in the Reynolds's (1962) structure. The normalization approach is an attempt to bring more integrative services at a level previously thought to be necessarily segregated. This approach was borrowed from a delivery system established in Sweden. Its major advocate (Wolfensberger, 1972) summarized in a set of published material, the human management process it prescribes.

Basic beliefs. Application of the normalization principle to special education programs implies that exceptional children should experience the educational and social activities generally provided for normal children. In this respect it is identical to the integration approach. Applying this principle to the problems of planning educational services for severe cases of exceptionalities would lead to changes in existing service arrangements as well as in practices of allocating children to special education programs. For instance, as pointed out by Bruininks and Rynders

> ... if adopted, the normalization principle would encourage the development of an array of service systems, all designed to maximize the meaningful integration of educable mentally retarded children into normal school routines. Under this principle, no child would be placed directly into segregated services arrangements unless it was certified that he was unable to be served in normal settings, even with specialized assistance. (Bruininks and Rynders, 1971, p. 6.).

The basic assumptions of normalization is evident in the view of the exceptional individual as being in a process of development and as having achieved a certain level of competence. It is a major shift from the pathological view of the handicapped. From such a belief in the potential of the individual, the principle flows as follows: "Utilization of means which are as culturally normative as possible, in order to establish and/or maintain personal behaviors and characteristics which are as culturally normative as possible" (Wolfensberger, 1972). The implications of the normalization are represented in Table 6.

Both dimensions deal with the structuring of the handicapped person's environment; one dimension involves the person directly, the other involves the way this person is symbolically represented in the minds of others. These dimensions are represented at three different levels of action. Interaction in this approach can be seen as consistent with the assumptions of the reversal of the condition ideology, and a true reversal from segregative action. However, the interpretation dimension is a new concept introduced by the normalization of the institutional and categorical approach. It constitutes a more comprehensive conceptualization of the interaction process than is the case in the integration approach. Finally, another concept specification has been attributed to the normalization approach. Integration (as opposed to segregation) is an essential part of normalization, and refers to those measures and practices which maximize a person's potential participation in the mainstream of the

Table 6

A Schema of the Expression of the Normalization Principle on Three Levels of Two Dimensions of Action (Wolfensberger, 1972)

Levels of action	Dimensions of action	
	Interaction	Interpretation
Person (individual)	Eliciting, shaping, and maintaining normative skills and habits in persons by means of direct physical and social interaction with them.	Presenting managing, addressing, labelling, and interpreting individual persons in a manner emphasizing their similarities to rather than differences from others.
Primary and intermediate social systems (family, classroom, school, etc.)	Eliciting, shaping, and maintaining normative skills and habits in persons by working indirectly through their primary and intermediate social systems, such as family, classroom, school, work setting, service agency, and neighborhood.	Shaping, presenting and interpreting intermediate social systems surrounding a person or consisting of target persons so that these systems as well as the persons in them are perceived as culturally normative as possible.
Societal systems (Provincial level)	Eliciting, shaping, and maintaining normative behavior in persons by appropriate shaping of large societal social systems, and structures such as entire school systems, laws, and government.	Shaping cultural values, attitudes, and stereotypes so as to elicit maximal feasible cultural acceptance of differences.

culture (Wolfensberger, 1972). In terms of the proponents of the normalization principle there are two types of integration: social and physical. Ultimately, integration is meaningful only if it is social integration, i.e., if it involves social interaction and acceptance, and not merely physical presence as often observed in the effects of the integration approach. However, social integration can only be attained if certain preconditions exist, among these being physical integration even though physical integration by itself will not guarantee social integration. Wolfensberger and Glenn (1973) specified the concept integration by discriminating variables involved in both physical and social integration. Table 7 summarizes their view of the concept.

Effects. The major consequence of the normalization approach was almost a revolutionary change in institutional care of mentally retarded persons. One of the products that came from the normalization approach was a method for the quantitative evaluation of human services such as the P.A.S.S. (Program Analysis of Service System) by Wolfensberger and Glenn (1973). This evaluation technique was elaborated in order to determine the level of integration achieved by a service system. Therefore, institutions could find, in the normalization principle and in its derivate the P.A.S.S., a complete model of facilities development grounded in the reversal of the condition ideology.

Table 7

Wolfensberger and Glenn (1973)
Determiners of Integration

PHYSICAL INTEGRATION	SOCIAL INTEGRATION
- The proximity of the service setting to normative social groupings	- Social interpretation of clients
- Access to it	- Program structures
- Its physical context to other facilities and settings	
- Its size	

Another effect of this normalization approach was the pressure it imposed on the regular educational system for helping the retarded children within its regular delivery system. Finally, the normalization approach went beyond the educational system in terms of its concern for integration. It was an attempt to systematize the management of all facilities (education, health, welfare, vocational) within a comprehensive planning process.

Criticisms. The first criticism to be directed at the normalization approach does not question its assumptions but rather its restrictive applications. This approach focused on the services for mentally retarded individuals, and no real attempt was made to place it within a comprehensive model for all exceptional children, therefore, for a complete special education system. Nevertheless, it was compatible with the integration approach; at least some assumptions were similar. Another criticism came from the opponents of behavior modification techniques. The normalization approach relies on operant conditioning for behavior adaptation in order to systematize the interaction process. Such technical practices were accused of potential normative conformism and of goal misconception from self-actualization to strict social adequacy. Adaptation should not be the aim of this approach; rather the aim should be the self-realization of the individual.

The danger was producing a stereotyped kind of adaptation solely for the purpose of adaptation.

The mainstreaming approach

The mainstreaming approach is the most recent conceptual framework of the reversal of the condition ideology. In some respects, it follows the path traced by its predecessors, the integration and normalization approach. Basically, it is oriented toward the same integrative goals. As has been indicated, the evolution of thought about the integrative approach has been marked by a broadening of the concept of integration. Mainstreaming is seen as evolving a more comprehensive conceptualization; it is oriented toward the integration of exceptional children into the regular education system. Also, it is a greater attempt to fashion special and regular education in such a way as to facilitate this process. Compared to the first tentative efforts at integration, often seen as a physical integration pattern, mainstreaming appears to be very complex. However, due to its relatively recent articulation, it has not been fully tested or implemented. This analysis will nevertheless try to summarize the information available in the literature on this approach.

Basic beliefs. Several assumptions and beliefs are at the roots of the mainstreaming approach. As a model of human management, a set of prescriptions is often included in its basic principles. In the analysis of basic beliefs, a description of both assumptions and prescriptive principles is attempted.

Jordan (1974) has summarized some mainstreaming basic assumptions in a straightforward manner:

> 1. First of all, children are children. They have similar needs; they develop similarly. The problems of the handicaps children have must be dealt with on an individual needs basis.
> 2. Parents of these children also have needs which the public school system has a responsibility to deal with.
> 3. The public education system has an obligation to all children, which must be fulfilled in a responsible and responsive manner.
> 4. Educational change is, for all of us, a way of life. It must be carefully planned in order to be directed so it will lead into constructive service. (Jordan, 1974, p. 31).

For Chaffin (1974), inherent in the philosophy of mainstreamed programs is the child's basic right to an equal educational opportunity - where equal means that the educational experiences are based on the child's unique needs. He also adds: "... for a majority of exceptional children integration not segregation, should be the first consideration in designing educational experiences". (Chaffin 1974, p. 7). This is also the view of Kauffman (1975) who indicates the rational behind such a principle as it would:

> 1. Remove the stigma that is associated with special class placement.
> 2. Enhance the social status of mentally retarded children with their nonhandicapped peers.

> 3. Facilitate the modeling of appropriate behavior as exhibited by nonhandicapped peers.
> 4. Provide a more cognitively stimulated peer environment.
> 5. Provide the mentally retarded child with competitive situations which the mildly impaired must eventually experience.
> (Kauffman, 1975, p. 10).

To come back to Chaffin, he also adds two other beliefs involved in mainstreaming:

> 1. Grouping and labelling of children into specific categories such as mentally retarded, emotionally disturbed, or learning disabled does not contribute significantly to the design of the instructional program.
> 2. Emphasis should be placed on decentralization of authority for program decisions to the individual school building level. (Chaffin, 1974, p. 7).

On the other hand, in a very prescriptive way, Reger (1974) has elaborated a list of principles involved in mainstreaming:

> 1. No child should be categorized with a label reflecting a gross diagnostic category.
> 2. Children should be evaluated with relevant instruments to determine those areas of strength and weakness that relate directly to specific, objective instructional actions. (Instructional actions means more than academic skills. It also means changing inappropriate behavior, providing training in occupational skills, etc.)
> 3. All children should be housed in the regular school building complex, or wherever other (nonhandicapped) children are housed.
> 4. Groupings of all children in the school should be based on defined needs. For children with special needs, as much as possible in the way of additional support services should be provided both directly to the children and to their teachers.

> 5. Diagnostic and prescriptive services for children with special needs are not enough. Such services should be directly tied to implementation of services, and whenever possible the same personnel who provide diagnostic and prescriptive services also should implement the instructional program, in cooperation with other teachers.
>
> 6. Consultation services to teaching personnel should have direct application to the instructional program, providing materials to use, techniques to try and management strategies. Consultant personnel whose major offering is high status, with limited or no recommendations that can be translated directly into useful action, should not be used.
>
> 7. Some children with severe disabilities will have to be grouped together for at least part of their day, if for no other reason than they cannot be placed to their advantage with nonhandicapped children. Such groupings should be based on individual performance criteria, not on gross and irrelevant noneducational diagnostic categories.
>
> 8. The leadership of the school, from the superintendent to the building principal and president of the teachers' union should work together on total program implementation. (Reger, 1974, p. 58).

In order to implement mainstreaming, the simple return of the child to the mainstream of education does not suffice. Rather changes must be made in the "mainstream". This simple belief articulated as principles by Reger indicates the level of complexity of a real effort to "mainstream" special education. Reger's prescriptive principles indicate a profound need for changing the educational process for the special and regular education approach to the instructional needs of exceptional children.

Effects. The consequences that are reported here are merely anticipated effects or outcomes of the implementation of the mainstreaming approach. They constitute hypotheses partly verified by the actual state of the experimentation with the approach. Jordan indicates the following several potential effects to be related to mainstreaming implementation:

> 1. Mainstreaming helps in the more meaningful involvement of large numbers of parents in school activities.
> 2. A school tends to become a more child centered community when mainstreaming is implemented.
> 3. Trade-off is an established part of the dynamic relationship between regular and special education teachers. It results in help for all children who need some particular kind of attention, whether identified as belonging in a special education program or not. (Jordan, 1974, p. 32).

One of the most organized version of mainstreaming was elaborated by Kauffman (1975). The definition he has given of mainstreaming shows the nature of the approach and also indicates on what levels change must be made to accomplish the aim of the model. In some ways, these levels or elements of change can be seen as fields of effect. Kauffman's definition goes as follow:

> Mainstreaming refers to the temporal, instructional and social integration of eligible exceptional children with normal peers based on an ongoing, individually determined educational

> planning and programming process and requires clarification of responsibility among regular and special education administrative, instructional and supportive personnel. (Kauffman, 1975, p. 10).

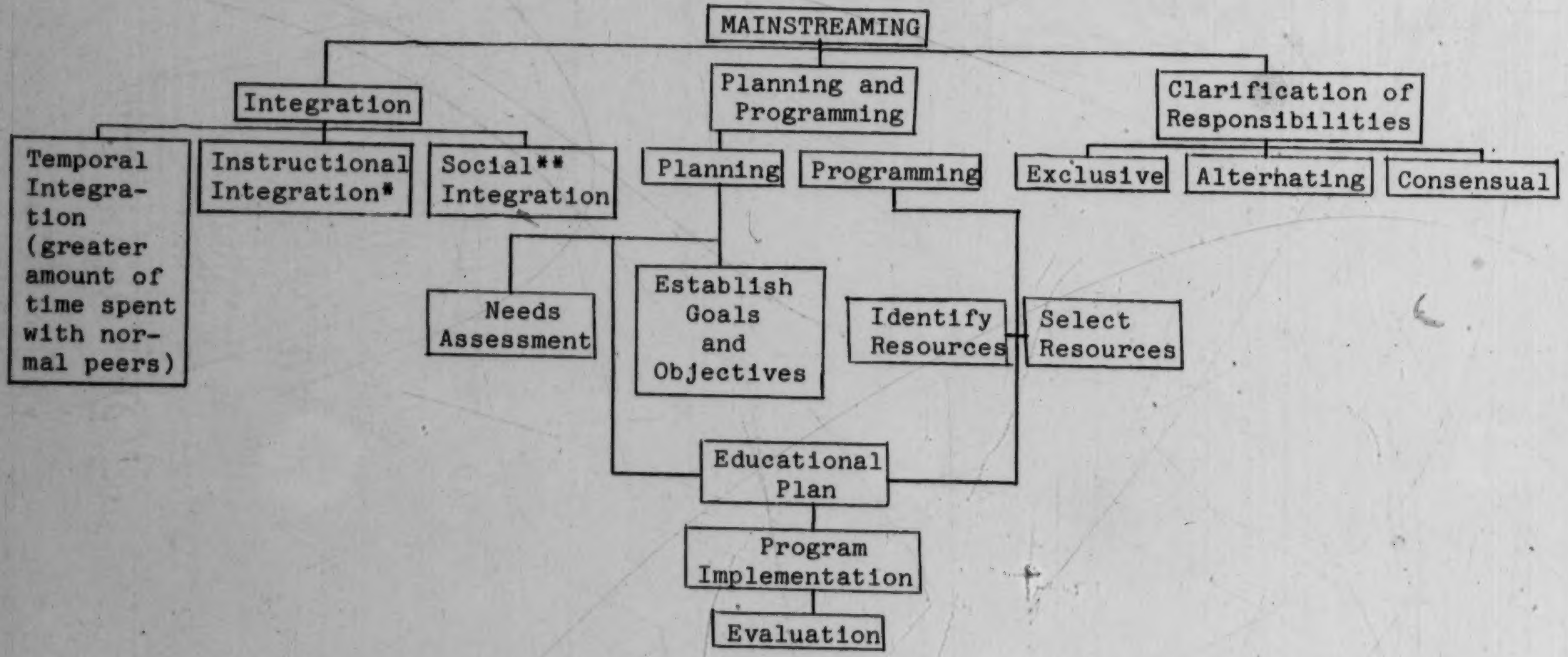
The components of this definition and their elements are represented schematically in Figure 3.

Criticisms. Kauffman's systematic definition of mainstreaming indicates clearly the level of involvement necessary for its implementation. One element that is worth noting is the fact that most of the writers cited on the approach of mainstreaming, like Kauffman, are interested in alternative facilities models for the education of the mentally retarded child (Jordan, 1974; Chaffin, 1974). The same remark was also made for the normalization approach. A question which can be raised concerning such orientation is: "Why do such models tend to deal with facilities for children who seem to be in the most severe handicapping condition for regular schooling integration, that is, with intellectual handicap capacities?" Mainstreaming then could possibly be accused of perpetuating the traditional view of academic achievement of the regular education system instead of focusing on diversified learning achievement as a goal of an entire educational system.

The proponents of such a criticism tend to favor a socio-psychological approach; this approach, as will be

Figure 3

Structure of Mainstreaming (Kauffman, 1975)


MAINSTREAMING
Integration
Planning and Programming
Clarification of Responsibilities
Temporal Integration (greater amount of time spent with normal peers)
Instructional Integration*
Social** Integration
Planning
Programming
Exclusive
Alternating
Consensual
Needs Assessment
Establish Goals and Objectives
Identify Resources
Select Resources
Educational Plan
Program Implementation
Evaluation

*Instructional integration

- child's learning characteristics and needs compability with (1) regular learning opportunities (2) teacher's ability and willingness to modify his instructional practices (3) teacher's instructional goals for the child.

**Social integration

- physical proximity
- social interactive behavior
- social assimilation
- social acceptance

discussed in the next ideology, is concerned with the establishment of a new social order in the school in order to diminish the absolute academic priorities and to shift to another type of goal. By facilitating the adaptation of teaching objectives and methods for exceptional children in the regular school, the mainstreaming approach satisfies the aim of matching the child's need to the educational environment. This environment is nevertheless still dichotomized; there is a mainstreamed process for exceptional children and another mainstreamed reality for nonhandicapped students. The integration (physical, instructional and social) is one sided: "integrating the exceptional into ..." which is not "integrating the nonhandicapped into ...". This approach is still devoted to the social order of the nonhandicapped world. The fallacy seems to be in some way cultural, integrating into the dominant culture. Another question concerns the extent to which the dominant culture or regular education system should be defined strictly by its nonhandicapped elements. In an attempt to answer such questions another ideology is growing in special education, namely the prevention ideology.

PREVENTION

The third ideological determiner of organization of special education is the prevention ideology. In some respects it is an extension of the reversal of the condition ideology. The prevention ideology is concerned with the establishment of conditions within the regular school system that enable everyone to participate and by so doing eliminate any labelling process based on handicaps or exceptional characteristics. As such it is as involved in integration modes of participation, as is the last ideology reviewed. It is assumed in the prevention ideology that only the needs of the child should be the basis for educational practices; however, it differs from previous models by the nature of the integration process it involves. In this last ideology, it is generally believed that the major effort should be, not to continue to find mainstreaming possibilities or integrated activities for the exceptional child, but to integrate special education into the regular educational system. This ideology shifts from a child-oriented integration approach to special education oriented integration. As has been discussed previously, the integration of exceptional children ought to be carried out at several levels and should not imply a one-sided or unidirectional assimilation pattern, the exceptional integrating with the regular. In the prevention ideology, the emphasis is placed on the regular system in order to open its boundaries for reciprocal integration. The process of helping every child with all of his needs is assumed to be the aim of "education". The burden of the potential for integration is not on the child but on the educational system. The concern of this ideology is not to integrate or normalize or mainstream the child, because he is seen as being already integrated into the process of education. The involvement is rather to develop within the system modes of participation suitable for everyone.

Two approaches are included in this ideology, one is concerned with instructional technology facilitating the educational participation; the other is oriented to the social-psychological aspects of the interpersonal transactions of the educational process. Both of these approaches are nourished by innovations or new conceptualizations of regular and special education. This ideology is identified as prevention. It is assumed that if the individual is allowed to participate in his own way in the regular educational system, no "system oriented" exceptionalities would be defined; therefore, it would prevent the establishment of exceptionalities and the identification of exceptional children. System oriented exceptionalities are due to conditions prescribing the non-participation of the child in the regular educational system, such exceptionalities would be non-existent.

The instructional approach

As previously indicated, the prevention ideology with its two approaches, is "fed" with elements of both special and regular education. The instructional approach is specifically included in this development. Since this ideology is quite recent, the evolution of regular education is related to its development. The question is how regular education actually accounts for individual differences? Therefore, to what extent do we tolerate the differentiation? In the case of the instructional approach, the answer is oriented toward the learning process and the establishment of objectives of academic achievement.

Basic beliefs and effects. This approach is based on the assumption that all children can learn; consequently, it postulates that the regular educational system ought to be achieving the goal of self-realization for everyone at different levels and in different ways of achieving. New trends in regular education such as the individualization of instruction, lower pupil-teacher ratio, better instructional technology, creativity centered pedagogy, proliferations of diversified grouping and options, open classroom, and so forth are all believed to permit different individuals to participate differently in the regular system. The instructional approach integrates special education into such a regular education system. The proponents of this approach have focused mainly on two levels of integration; the first one is concerned with the pedagogy or how to teach while the second is oriented toward the establishment of specialized services for all children.

The first trend in the instructional approach is characterized by the work of Siegel (1969) in a book entitled Special Education in the Regular Classroom. Siegel, in an attempt to promote the process of integration, elaborated a set of teaching techniques for solving nine basic problems identified as the most common difficulties of exceptional children in the school. These techniques are presented for regular education teachers in order to enable them to work in their classrooms with children who give signs of difficulty. Siegel's work is directly oriented toward the prevention of exceptionality, even though it was principally seen as contributing to the type of study done to facilitate the integration of exceptional children into a regular class environment. One element of Siegel's study that constitutes a departure from previous practices is the consideration of areas of commonality in specific learning or behavioral problems despite the different etiology or type of exceptionality. The educational and psychological problems presented by Siegel were selected on the basis of four criteria: (1) frequency, (2) commonality, (3) significance, (4) feasibility. These problems are listed in Table 8.

Seigel's work also illustrates another dimension of prevention, namely, the readiness dimension. According to this view of educational or social intervention in the child's

Table 8

Siegel (1969) List of Educational and Psychological Problems

Poor self concept
Anxiety
Difficulty in paying attention
Difficulty in organizing
Difficulty in copying written material
Poor coordination
Difficulty in abstract thinking
Behavioral problems
Social immaturity

learning process and behavior adaptation, there is a notion of prerequisites to academic achievement. In other words, the child should achieve a certain level of readiness before being able to learn specific knowledge; this readiness is achieved only when his problems are under control. Another author who has been involved in the theorizing, Hewett (1968), established a "developmental sequence of educational goals." For Hewett, the belief supporting this sequence is that "in order for successful learning to occur the child must pay attention, respond, follow directions, freely and accurately explore the environment and function appropriately in relation to others." (Hewett, 1968, p. 42). Hewett's developmental sequence is reproduced in Figure 4.

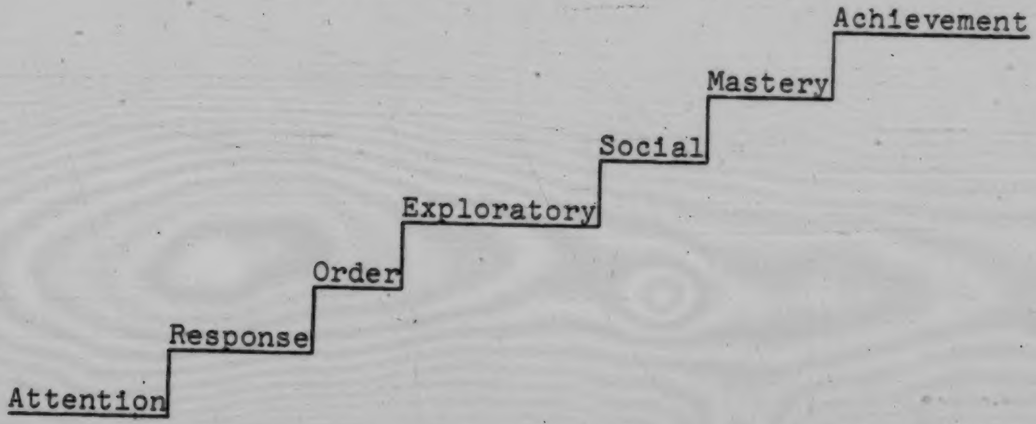
Special intervention is then seen as facilitating the learning of each of these behaviors by the child.

> It further hypothesized (developmental sequence) that the learning of these behaviors occurs during the normal course of development from infancy to school age, and failure to learn any or all of them may preclude the child's being ready for school. For such a child, they constitute the "somethings" he must learn in the process of getting ready for school while he is actually there. (Hewett, 1968, p. 43).

Siegel's and Hewett's studies differ in several ways. While Siegel tends to develop a psycho-educational approach with the emphasis on a positive hygienic climate, Hewett favors an operant conditioning approach. His engineered

Figure 4

Hewett's Developmental Sequence of Educational Goals (Hewett, 1968)


Achievement
Mastery
Social
Exploratory
Order
Response
Attention

classroom approach is derived from classical and operant conditioning models. Siegel is concerned with children with mildly severe handicaps while Hewett is mainly concerned with emotionally disturbed children but extends his approach to all behavioral problems.

Finally, Siegel's work is oriented toward the regular teacher approach while Hewett's is concerned with special designed classrooms within the regular school but with specially trained teachers. However, both represent an attempt to prevent exceptionality by preventing the child's problem from becoming bigger and bigger because of failure perpetuation. Although Hewett's approach can be seen as similar to that of Siegel in regards to prevention, it is also concerned with the second dimension of instructional approach: the establishment of specialized services.

This second trend is well illustrated by Reynolds and Balow (1972) in their work on an "instructional system" concept. According to them, the term "instructional system" refers to "integrated sets of procedures, curricula, and materials that may be used to achieve certain major learning goals with children" (Reynolds and Balow, 1972, p. 362). Special education then becomes an aggregate term covering all specialized forms of instruction that ordinarily cannot be offered by regular classroom teachers. Their instructional system concept prescribes a type of relation between regular and special education, as represented schematically in Figure 5.

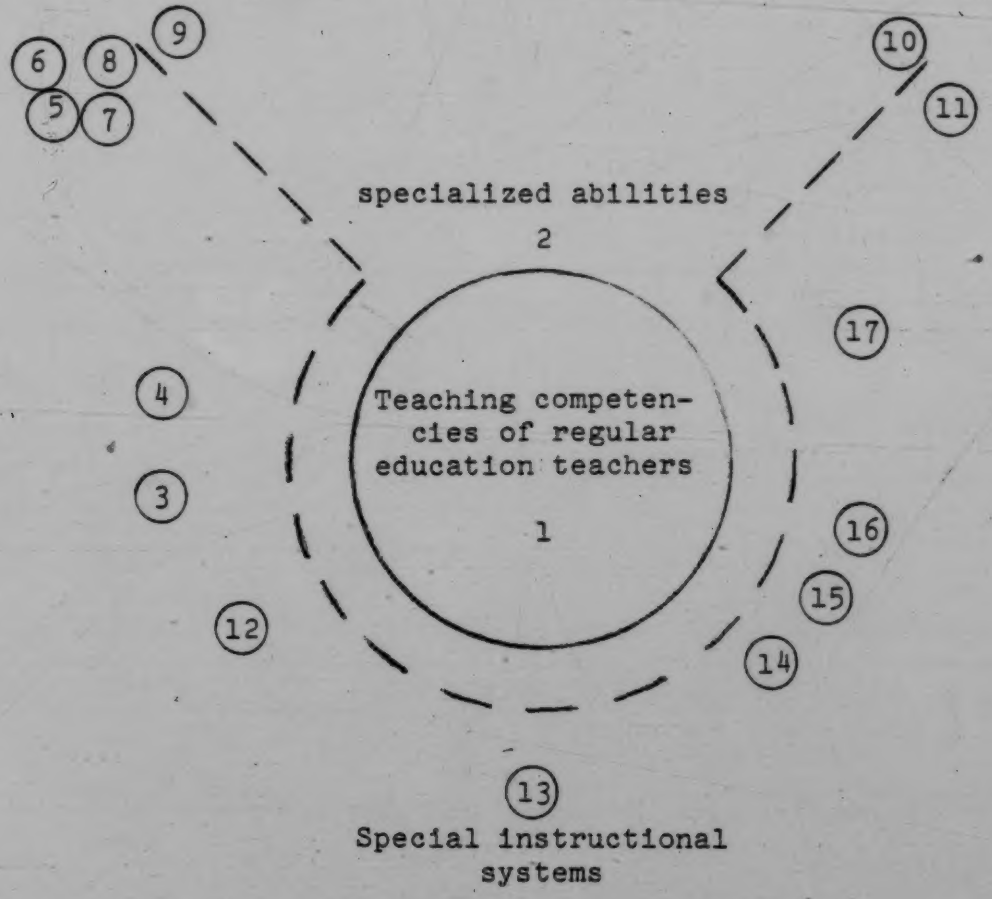
In this figure, the relatively large circle (1) symbolizes the teaching competencies possessed by regular classroom teachers. The dotted portion, (2) of the figure tends to enlarge the first circle (1) and represents the efforts that should be made to extend the specialized abilities and sensitivities of regular teachers. This could possibly be done with Siegel's approach, for example. All the remaining small circles (3, 4, 5...n) are intended to represent special instructional systems that most often are offered by specially trained personnel. This approach has the intention to offer the services under the "instructional system" schema to all children. Another element is presented by the authors concerning the problem of assigning specific children to the various instructional system. They indicate that

> ... educators must learn to interpret variables that produce interaction effects with instructional systems. In other words, children should be placed in special programs on the basis of demonstrated aptitude by treatment interactions. (Reynolds and Balow, 1972, p. 360).

Under such an approach the child should have access to instructional systems relevant to his needs within the regular education system. This view of special education also

Figure 5

Relations of Special Instructional Systems to Regular Education (Reynolds and Balow, 1972)


⑨
⑥ ⑧
⑤ ⑦
⑩
⑪
specialized abilities
2
⑰
④
Teaching competencies of regular education teachers
1
③
⑯
⑮
⑫
⑭
⑬
Special instructional systems

contributes to integration and to the prevention of exceptionalities which stem from categorizing the individual. Instructional systems are seen as specialized instructional techniques and processes under the regular education responsibility.

Criticism. Even if only Hewett's model were completely implemented, it would be possible to indicate several general criticisms concerning this instructional approach. First, this approach continues to assume that pressure for academic achievement is a given in the educational system and does not directly attempt to shift to other types of objectives. On the contrary, it tends to organize for the exceptional child a more adaptive process for insertion in the system. In other words, it tends to work on the child's capacities to deal with academic achievement pressure or to be competitive. Again, such a model does not pretend to change directly the competitive nature of learning to another type even though the authors cited all agree upon the damaging effects of frustration through failure in such a competitive system. Their effort to integrate special education in terms of its instructional nature represents great improvements on previous models but nevertheless could be subject to the accusation formulated by Christoplos and Renz (1972, p. 376). "Special education is a solution to the 'problem' of educators in achieving their own goal of social homogeneity, instead of educational goals for children." This remark is concerned with alternative social order in the school and the legitimization process which is the focus of the next approach, the socio-psychological approach to special education.

The socio-psychological approach

The last approach considered in this analysis of special education is in some ways hypothetical; it is defined as a specific approach because of the insights to be found in the literature concerning the need for a more environment-oriented view of special education. The hypothetical nature resides in the possible impact of this view of special education on administrative structures or as the base for the establishment of an organizational model.

The socio-psychological approach is a trend shared by the socio-psychological analysts of special education. Sodhi (1972, p. 6) has named this trend "The psycho-social orientation of special education". The new progressives, as he called the analysts, are of the opinion that exceptional children are "special" not because they have certain distinctive physical and behavioral characteristics, but because our society chooses to treat such children differently, because "experts" define them as creating problems, because social agencies, particularly the schools, choose to create special arrangements for dealing with them. "This approach emphasizes that society creates a handicap by identifying a 'condition' and by providing treatment for the condition so identified." In an educational perspective, this was attributed "to the fact that schools create handicaps through defining standards that students cannot meet and then create destructive remedial programs to make the deviants come up to the arbitrary standards of group." (Sodhi, 1972, p. 7).

After trying to illustrate the social nature of the exceptional phenomenon, Bélanger raised a major question:

> Si l'enfance exceptionnelle est un phénomène social - ne suit-il pas que les professionnels au service de l'enfance exceptionnelle comme individus, groupes ou organismes, doivent orienter leur action non seulement vers l'éducation des exceptionnels en vue de leur insertion partielle ou totale dans la société, mais également vers la réforme sociale, vers le changement des situations sociales qui donnent naissance aux caractéristiques dites exceptionnelles? (Bélanger, 1970, p. 17).

This argument for involvement in a changing social order, by teachers and other professionals in the field, tends to imply a greater social reform movement than all the other approaches in special education. To be more specific, if the school is seen as a social system, could we change the order or rules of the system in order to avoid conditions that generate exceptionalities? If for instance, the school as a social system is mainly defined by interpersonal actions that are the bases of a self-realization process or of a developmental frame of reference, could it be possible that such system be open to everyone? The basic assumptions of the socio-psychological approach are directly related to such questions. The school is the basic unit of the educational process; it constitutes an interaction system and is definable as a social system which should aim at the self realization of its members. It should account for all individual differences, thus satisfying special needs without generating marginality as is the case for exceptional children.

Exceptionality, as in the social-psychological approach, came to be defined as a condition of mismatch between the individual with specific needs and the norms of the social setting where he ought to be seeking the satisfaction of his needs. Compared to the first type of special education practice, geared to a "cure" approach with its administrative easiness, the social-psychological view brought forward a far more complex set of prescriptions for special education. It would appear very simplistic to consider any exceptionality as a simple disease to be treated in specialized settings. The questions raised by the social-psychological approach go far beyond the individual's ability to adapt to the social system and lead toward the existence of different forms of social participation. Exceptionality has been proven not to be a simple cause-effect condition, but a complex resultant of the interaction of a vast number of elements. These elements can be found in the growing knowledge of exceptionality as described in the evolution of special education itself. They are related to the nature of exceptionality, to the type of delivery system established in different educational settings, and also to the attitude of society.

More and more it is believed that in studying the nature of handicaps, one ought to look for conditions of adaptation rather than for elements of exceptionality, (Giroux, 1970). According to McGrath (1970), adaptation must be considered in terms of the relationship between external physical and social demands on the person and his resources for dealing with them. If special education aims at the facilitation of such an adaptive interaction process, it ought to be involved at both the demand and resources levels. This imperative leads to the involvement of special education in the analysis of social participation of individuals. Man's abilities to cope with the environment depend on the efficacy and range of the solutions that his culture provides or accepts, and the skills he develops are dependent, at least in part, on the adequacy of the preparatory institutions to which he has been exposed.

> To the extent that schools and informal types of preparation are inadequate to the tasks men face, social disruption and personal failure will be inevitable no matter how strong the individual's psychological capacities. (Mechanic, 1974, p. 33).

This view of the adaptation process follows the same conceptualization of human growth as the social-psychological approach. It is not accidental that this approach as well as studies on social participation (Parson, 1951; Rocher, 1969; Thompson, 1970; Loomis, 1960; Buckley, 1961), and on personality development (Carson, 1969; Coelho, Hamburg and Adams, 1974), tend to identify a complex interaction of elements in the process of adaptation. They all share a systemic view of human participation in social settings. They consider social entities as systems and assume the non-linearity of and complex interactions among the parts that make up the system. The key feature of this systemic view of adaptation is the focus of such an approach on the process of individual growth, development, or self-realization within a social context with specific norms. How could individual goals and needs be satisfied within an interaction process in a setting that tends to have its own norms and needs? It is assumed that greater knowledge of the adaptation process should be achieved in order to redefine exceptionalities on the basis of reciprocal difficulties in the interaction of individuals in a societal setting. Again, in such redefinition, one should not look for the linear relation or self-fulfilling prophecies like "such a disfunction should generate such exceptionality". Adaptation involves many variables and should be conceptualized in terms of a strategy of action.

In order to reproduce clearly the conceptualization of the socio-psychological approach, an extensive quotation of the contribution by Christoplos and Renz (1972) follows. The analysis tends to focus on the competitive nature of education as a source of exceptionality and expresses a view of special education as, in part, a product of "pressurized" education.

> The complexity of the issues involved in identifying appropriate educational goals cannot be overlooked. Compulsory public school education in a heterogeneous society is a sensitive and emotionally charged assignment, especially when it is extended to include children who deviate widely from the norm. The schizophrenic dilemma of a society trying to reconcile goals of competition and cooperation quality and equality has been pinpointed by Keppel (1966). Although he believes that quality is necessary for success in a competitive society, he cannot accept the concomitant idea that the teaching of cooperation, which is the foundation of a durable democracy, must suffer in consequence. An avoidance of clearly stated purposes allows educators to verbally support cooperation (and include most children in the educational system) then establish programs appropriate only for a segment of the population those who are able to manage competition. Indeed, competition is emphasized, and conflicting philosophy and practice are maintained without modification of either. There can be little doubt that a clear establishment of the priority of cooperation, in practice as well as in philosophy, is critical for special education.
>
> Carlson (1964) further clarified the conflict between philosophy and practice which is so apparent today in education. He categorized organizations in terms of the relationship between the organization and its clients. Public schools are of the organizational type in which there is no

> control over admission of clients (students), and in which the clients, in turn, have no choice but to accept the service being offered (education) regardless of its quality. There is no problem of the school meeting criterion goals at the risk of being abandoned. Regardless of the quality of the service, students will be available and financing of the schools will be relatively secure. Carlson identified two adaptive responses on the part of the public school to the problem of lack of control over selection of students: segregation and preferential treatment. These adaptations are made not for the purpose of meeting the client's needs.
>
> Special education programs were not initiated in response to the needs of exceptional children, but rather as an expedient measure to resist a perceived threat to existing goals for "normal" children who were being more or less adequately served by regular school programs.
>
> Within the logic of the above argument, exceptionality is defined by the nature of society, not by the nature of individuals. Exceptionality in education becomes the condition of NOT meeting one or more critical general education goals which are of such importance to educators that failure to achieve them on the part of some students is intolerable to the educators and results in total or partial, single or group, segregation of these students. (Christoplos and Renz, 1972, p. 372).

Such a definition of exceptionality and view of education calls for a twofold adjustment: first, to set new goals for education, and second, to establish a cooperative mode of interaction to achieve these goals. If academic achievement and competition are part of the educational system's social order, the integration of special education into such a system calls for major changes in the social order.

For special education, the above statement constitutes the "state of the art" as far as the socio-psychological approach is concerned. The supporters of this approach believe that the reform should come from regular education. Reformists in educational literature such as Friedenberg, Illich, Herndon, Kozol, Kohl, Holt, Postman and Weingartner, all tend to define a more integrated school, a school for everyone. Not all school systems have endorsed this view of exceptionality and the resulting effort to change the traditional social order. The door is open for adjustments but the road is long.

SUMMARY

This chapter has attempted to identify and define the major ideological determiners of organization for special education. It has not been limited to a survey of literature but constitutes an essay to establish a conceptual classification of these trends and to describe their nature.

The contribution of this study to the field of special education will emphasize the prevention ideology, and more specially will correspond to the premises of the socio-psychological approach. However, in this attempt to develop a model of special education under such premises, elements of other approaches will also be used. For example, the following dimensions probably will be useful in the elaboration of the model: the interpretation dimension of the normalization approach, the instructional system concept of the instructional approach, the types of integration of the mainstreaming approach and principally the cooperative nature of the socio-psychological approach. It appears more clearly that the model to be developed in this study is involved in planning the integration of the special education process with the regular school system processes. Therefore, a conceptualization of the social-psychological process within the social system of the school constitutes the basis for such integration. In order to proceed to the analysis, the next chapter will focus on the nature of systems as defined by systems theory.

Chapter III

THE SYSTEM CONCEPTUAL FRAMEWORK

The analysis of special education practices and the identification of the socio-psychological approach brought a new perspective on the purpose of education and of special education, that is self-actualization of the individual in an extended definition of social participation. The socio-psychological approach has been affected also by some systemic conceptualizations of man and society. In a systems perspective the self-actualization purpose could generate a new set of interactions and a rather different component identification of special education.

It is possible to hypothesize that the attributes shown by systems can be applied to human development in social settings, such as special education. The initial analysis of the nature of systems, as outlined by Von Bertalanffy, has established a set of properties and a conceptual basis in order to describe, explain and predict the behavior of a system. One view holds that, at a basic level, all of the disciplines of study must deal with systems of one kind or another and that there must be a goodly number of basic orienting concepts which are relevant to systems of all kinds

(Young, 1964). According to Milstein and Belasco (1973), General System Theory should not be seen as a theory:

> Rather, the open system is a framework, a 'meta theory', a model in the broadest sense. It is an approach and a conceptual language which is useful in terms of understanding and describing many of the organizational phenomena that involve educational institutions. (Milstein and Belasco, 1973, p. 1).

For them "... human systems are the recurrent patterns of actions of individuals and culture involving one or many individuals together with such cultural phenomena as ideas, words, symbols, artifacts, beliefs and emotions." (Milstein and Belasco, 1973, p. 2). Their definition of human system is highly congruent with McGrath's (1970) definition of adaptation in terms of their transactional view of man. Such similarities are to be found in many fields of study if the conceptual language of systems is used.

If it is assumed that exceptionality is not wholly to be found within the individual as a constant or fixed condition, then it is possible to think of it as an output of a personal transaction, at a specific period of time, with the elements of the system in which the person is involved. The handicap is directly related to the integration pattern of the individual in the system, since a typology of transactional processes is inscribed in the system processes. A study of system properties should then help to understand the nature of exceptionality and therefore of special education under such a transactional assumption. As a first step toward the establishment of a model based on a system conceptual framework, it is necessary to determine clearly the definition of the systemic concepts to be used. Then, at a second stage, the concepts can be applied to the description of specific phenomenon.

It is the purpose of this chapter to study specific system concepts and to relate to their definition some possible extensions of the concepts in relevant special education issues. This analysis is based on a systems concepts survey elaborated by Young (1964).

The presentation of concepts that follows is classified under four categories from Young (1964). First, there are Systemic and Descriptive Factors where concepts deal with types of systems, the internal organization of systems, and systems and their surroundings. Second there are Regulation and Maintenance concepts that deal with the regulation, control, and stabilization of systems. Third, by factors of Dynamics and Change that deal with problems of non-disruptive change, responses to attend environmental conditions, and internally generated processes of change; and fourth, Decline and Breakdown whose concepts emphasize problems of disruption, dissolution and breakdown in systems.

This part of the study, dealing with systems concepts, is oriented toward a review of these concepts and to the exploration of their possible significance in special education. This analysis is therefore related to the interpretative potentiality of systems concepts in the field of special education and more specifically under a socio-psychological perspective geared on self-actualization purpose and adaptation processes.

Systems theory is used in this study as a model for or as an interpretative model for the elaboration of a model of special education. A review of systems concepts is done and tentative interpretations of the concepts are exposed in terms of special education applications. Therefore the discussion is more of a prescriptive nature that is oriented to what ought to be rather than to what is, even though examples of the actual reality of special education are used in the discussion.

SYSTEMIC AND DESCRIPTIVE FACTORS

System

According to Hall and Fagen (1956, p. 18), a system can be defined as "a set of objects together with relationships between the objects and between their attributes." Their definition does imply that a system has properties, functions or purposes distinct from its constituent objects, relationships and attributes. This last point is made in Buckley's (1967) discussion on social entities:

> Thus, if social groups are not 'real entities', then neither are individual organisms, organs, cells, molecules or atoms, since they are all 'nothing but' the constituents of which they are made. But this 'nothing but' hides the central key to modern thinking - the fact of organization of components into systemic relationships. When we say that 'the whole is more than the sum of its parts', the meaning becomes unambiguous and loses its mystery: the 'more than' points to the fact of organization, which imparts to the aggregate characteristics that are not only different from, but often not found in the components alone; and the 'sum of the parts' must be taken to mean, not only their numerical addition, but their unorganized aggregation. (Buckley, 1967, p. 42).

In conceptualizing special education as a system, all elements that one can identify as being part of special education should be considered as components of the system. Special education is therefore more than special instruction. Considering the system components, based on a definition of special education as part of a process of growth or self-realization, one ought to identify the human as well as the physical and action oriented elements. Human components such as the children, the parents, the teachers, and the administrators, and physical ones such as the schools, the institutions, and the family residence, ought to be considered. Also, the process of goal achievement that links them together generates activities such as teaching, counseling, education and administration. If the human and physical elements and their attributes constitute the basic components of the system, the action-oriented elements are the pattern of relationships among them. For example, the existence of special educators in the system, is related to the existence of exceptional children to be involved in an educational relationship. This relationship is defined as "special education" and is also the response of the system to the external demand for education for everyone. In this way, special education appears as a mode of organization of different components into a set of relationships oriented toward the purpose of education.

Open system

For Buckley (1967), a system is a

> ... set of different things or parts that meet two requirements: first, these parts are directly or indirectly related to one another in a network of reciprocal causal effects, and second, each component part is related to one or more of the other parts of the set in a reasonably stable way during any particular period of time. (Buckley, 1967, p. 41).

The chief characteristic of such systems is an almost continuous interchange not only within the system, but across the boundary between the inner components and the outer environment.

Special education as described in the beginning of this chapter cannot be seen as a closed transformation process (learning, education) involving fixed or determined variables. Such a perception would emphasize strict categories of exceptionality related to determined kinds of action (teaching or treatment) in a very stable kind of setting (schooling process). This is what the integration and socio-psychological approach seek to change in special education.

On the contrary, special education as an open system is exposed to external factors that influence the nature of the special education components. For instance, the cultural factors related to the perception of exceptionality are inscribed in a larger system than special education. Societal norms and values define the nature of exceptionality. It is possible to observe that if, in a specific school area, the parents do not wish to see their children in the same classroom with a mentally retarded child, they generate a condition of social exclusion and reinforce the label assigned to the exceptional student. A possible reaction of the special education system will be to adapt its services to such external pressures. As a result of a change in the cultural settings, the inner relationship between the components of the system can be transformed. New teaching functions could be introduced or a change in grouping habits could follow such a change in the environment. Therefore, the systemic analysis of special education tends to see it as an open system rather than a closed system, one which is considered to be in interaction with the environment rather than isolated from it. The transaction process between the system and its environment will be more fully discussed in terms of establishing the nature of such relationships in the next chapter.

Boundaries

The boundaries determine inclusion of elements in and exclusion of elements from a system. They can be conceived as a line or area which determines the frontier between the system and its environment. It is possible to establish the limits given to the system by delimiting its boundaries. This is part of the identification or description of the system, since it differentiates it from other systems.

If for example the definition of special education is based on the study by Reynolds and Balow (1972) in their work on "instructional systems", as presented in Chapter II, (p. 37) then the term "instructional system" refers to "integrated sets of procedures, curricula, and materials that may be used to achieve certain major learning goals with children". If human elements are added to this version, "special education system" becomes an aggregate term covering all specialized forms of instruction that ordinarily cannot be offered by unassisted regular classroom teachers. All the elements and processes devoted to such a goal will then fall within the boundaries of the system of special education. Also, this definition has the characteristic of differentiating special and regular education by specifying the nature of the task to be performed in special education.

Environment

Hall and Fagen (1956, p. 20) define this concept as "the set of all objects a change in whose attributes affects the system and also those objects whose attributes are changed by the behavior of the system". The elements that fall within the environment are not specifically related to the task of the system but nevertheless have a bearing on it.

Special education can be viewed as having an environment as large as the society in which it is embedded. It can be defined as a subsystem of a regular or total education system, and therefore its environment is the same as that of the education system. Since education can be defined as a social institution, one can think of it as a socially legitimated process (Fichter, 1966). The interaction with the societal environment, even if the society is a vague and large entity, can be specified. For instance, in the discussion on the cultural bias in definitions of exceptionality, it was possible to identify interaction between internal elements and societal factors as a transaction between the system and its environment.

Subsystem

A subsystem is a set of elements or a functional component of a larger system which fulfils the conditions of a system in itself, but which also plays a specialized role in the operation of the larger system. Special education is a specialized part of the educational system. It should not be conceived as a separate system from regular education, but as integrated in the educational system as a subsystem of a specialized set of elements devoted to the goal of the global system. Special education is characterized by a different perspective rather than a separate perspective.

Integration

Integration refers to actual mechanisms and organizational principles which hold a system together whereas wholeness is a general measurement of internal interdependence. (Young, 1964). This property is applied to both special education and to the total education system. People are integrated into the system because of the functional interdependence of the roles they play. Because the requirements of different roles are interrelated, people who perform them are bound together and, as a result, the system achieves a degree of integration. The Reynolds and Balow (1972) study of "instructional systems" could be used to show the relation between special education components. Integration in a system view of special education could be described as the interdependence and organization of "instructional systems". Integration is analogous to participation of the components in organized patterns of goal achievement in the system. All the elements with diversified roles devoted to instructional tasks are integrated in the system. The concept of integration in the system framework has a different definition than it has when used in special education. This different perspective on integration brings new insights to the nature of participation and will be discussed in the next chapter of this study.

Differentiation

Differentiation refers to the distinctiveness or distinguishability of the components of a system. When diversified roles are defined in the system a differentiation process takes place; new functions are defined and new roles are established. According to Hall and Fagen (1956), who prefer to use the concept of progressive segregation to clarify the concept of differentiation, there are two kinds of progressive segregation.

1. The first kind corresponds to a separation of some elements from others and the growth of an independent function. If a new element is totally independent from other

elements, then it is not a part of the system, and the process leads to the decay of the system.

2. The second kind of progressive segregation corresponds to growth. The system changes by increasing the number of divisions which leads to differentiation of functions. This process can be simultaneous with progressive systematization which is equivalent to integration.

Progressive systematization for Hall and Fagen

> ... may consist of strengthening the preexisting relations among the parts, the development of relations among parts previously unrelated, the gradual addition of parts and relations to a system, or some combination of these changes. (Hall and Fagen, 1956).

In any system there are degrees or levels of both integration and differentiation (Young, 1964).

Interdependence and independence

These concepts are associated with the relationship between the components of the system. This relationship may be analyzed in terms of degrees on a continuum whose poles are complete independence and total interdependence. Independence refers to parts that are unrelated while interdependence accounts for the reciprocal effect of change. There is interdependence when a change or changes in one or more parts of the system noticeably affect the system as a whole, or affect some of its parts in more or less complex ways (Young, 1964). According to Hall and Fagen (1956), if there is interdependence in a system, the system will behave as a whole or coherently. Also, if there is a set of parts that are completely unrelated, the variation in the set is the physical sum of the variations of the parts. Such phenomena are presented to illustrate independence or physical summativity. Wholeness and summativity as related to interdependence and independence are crucial concepts for the description of a system.

The use of differentiated "instructional systems" as the base of special education requires a high level of interdependence within the total education system. As has been indicated, the establishment of diversified (differentiated) types of instructional processes necessitates strong systematization. If only one type of instructional process exists, only a simple organization is required. Implementing special education through a wide range of learning opportunities requires a larger degree of differentiation of components and highly diversified roles or functions. Cohesiveness in such a system can be achieved by fostering the interdependence of these functions or by their systematization.

Interaction

According to Young (1964) interaction is a mutually effective action involving two or more systems of the same or of different orders. The interaction concept is at the center of all interdependent relationships. System components are not only involved in action, but as a result of the cohesiveness of the system they interact or are mutually affected by such actions.

One of the intended outcomes of the ideological classification of Chapter II was the possible achievement of a consciousness of the impact of ideologies on action. In other words, this is the awareness of the interdependence of the components included in a specific ideology. For instance, the categorical approach could be declared to be incongruent with an ideology of prevention, because the types of stereotyped practices implied by labeled categories affect directly the development of exceptionalities. The pattern of interaction between students and teachers is inscribed in the categories so that self-realization is limited to several expectations and a high level of exceptionality tends to be perpetuated.

Centralization

A centralized system is one in which one element or subsystem plays a major or dominant role in the operation of the system (Hall and Fagen, 1956). A small change in the leading part will then be reflected throughout the total system. The leading part is most often involved in the control of the system. A change in one "instructional system" as a functional subsystem can happen without affecting other "instructional systems", but a change in the supervision components or control subsystem can affect several, if not all, components. This suggests that "instructional systems" as in the Reynolds and Balow (1972) point of view are not to be centralized but rather decentralized in the system's functional subsystems even though centralized control is needed in order to articulate the interdependence of all subsystems. There is also another definition to be given to the concept of centralization in special and regular education, namely, the relation between a collective nature of learning perspective and the centralization of teaching. The model of special education that will be developed should emphasize a decentralization of the teaching function and should be open to other teaching agents besides considering only the teachers; therefore, it is possible to think of centralization of teaching as another application of this system concept.

There is a reverse condition of centralization which is decentralization. This concept refers to the distribution of control among the components. The centralization-decentralization of control will be referred to in the next chapter as one characteristic of the effort to integrate special education with regular education.

Equifinality

Von Bertalanffy defines this concept by suggesting that "The same final state may be reached from different initial conditions and in different ways." (Von Bertalanffy, 1956, p. 4). If grossly applied to educational processes, this concept opens a very broad perspective of potential action. Different initial conditions could refer to the diversified nature of individuals and different ways to alternative "instructional systems". The concept suggests that it would be possible to achieve a common goal, from different individual conditions and by different ways. If this goal is the self-realization of the person, then how individualized should become the process of education? This is a concept that tends to call for the individualization of instruction. Furthermore, it emphasizes the importance of diversified life experience in the process of growth for the individual. From another perspective, the concept of equifinality tends also to question the labeling of exceptionality. Equifinality as prevalent in the interaction pattern of a system should expand the boundary of normality thus limiting marginality to highly non-adapted behavior or actions. In the school such an approach to individualization could limit the prevalence of exceptionality by recognizing a differentiation of the components, while their integration is assumed by the normalization and legitimization of different learning experiences.

REGULATION AND MAINTENANCE

Stability

"A system is stable with respect to certain of its variables if these variables tend to remain within defined limits - a system may be stable in some respects and unstable in others." (Hall and Fagen, 1956, p. 23). The concept of stability has to be understood in relation to changes that may occur in a system. If a change is affected in the system and most of its components tend to be unaffected, the components are highly independent; this can be a factor affecting stability. When the components are independent, the system is one where few changes occur, or where changes affect the elements in a very limited way.

Stability in education as far as special education is concerned could be one result of segregation as defined in special education. If, for instance, regular classroom learning environments are defined as stable units with high academic achievement, then the system may include in these classroom units only the students that are capable of keeping the academic achievement at a respectable level. The students grouped in a regular classroom tend to be good achievers. The stability drive then creates a demand for a "special environment" for non-achievers. A system built on such perceptions tends to identify exceptional children as a threat to the stability of its subsystems or classrooms. This factor could partially explain the negative reaction of most regular classroom teachers to the placement of exceptional children in their classroom. The concept discussed above relates to stable means and stable levels of goal achievement. This point will be further discussed in the next chapter of this report.

Equilibrium

This concept refers to the tendency of a system to move back toward a given point (equilibrium point) after being disturbed by forces external to the system. It can also be seen as a state of rest caused by the interaction of opposing forces (Young, 1964). The equilibrium can be stable or unstable depending on the system adaptation to changes, but if system stability refers to the rest caused by the interaction of opposing forces it could be the cause of decay or of destruction of the system. For Bertalanffy (1968) a system that grows can be thought of as maintaining a state of disequilibrium.

The presence of so-called exceptional children in a regular classroom can be a source of disequilibrium for the system and as such may be beneficial. Disequilibrium calls for adaptive behavior and can define new states and change the rate of progress toward goal achievement; therefore, educators should be interested in both disequilibrium and equilibrium, because the disequilibrium can lead to either system growth or system decay.

Feedback

For Hall and Fagen (1956) a feedback mechanism implies that some of the outputs or behaviors are fed back into the input to affect succeeding outputs. For Kantor and Lehr, the feedback concept is a key concept in systems thinking.

> System theory asserts that complexly organized, open, and adaptive information - processing systems are purposive and goal seeking unlike their counterparts, the mechanical systems. The basic principle underlying such purposive or goal-seeking activity is feedback, a process by which a system informs its component parts how to relate to one another and to the external environment in order to facilitate the correct or beneficial execution of certain system functions. (Kantor and Lehr, 1975, p. 12).

According to Deutsch (1951, p. 198) ... "in the world of equilibrium theory, there is no growth, no evolution, no sudden changes, no efficient prediction of the consequences of 'friction' 'over time'." For Buckley (1967, p. 56) on the other hand, "Feedback theory, does not push 'friction' into the background, but can deal specifically with the 'lag' and 'gain' between impinging events." He also adds that

> ... feedback-controlled systems are referred to as goal-directed, and not merely goal-oriented, since it is the deviations from the goal-state itself that direct the behavior of the system, rather than some predetermined internal mechanism that aims blindly. (Buckley, 1967, p. 53).

If the interest in disequilibrium is expressed in terms of feedback, then the system is goal-directed. As such, the education system should be oriented to adaptive actions based on feedback-determined adjustments. This implies that within the system, the interest should not be in the devotion of the components to the goal, but to the adaptation of their action to the goal by use of constant monitoring devices. Therefore, such a system tends to facilitate and prescribe functional adaptation or adjustment in order to maintain goal-direction, and achievement. In this way the system can be seen as open to changes.

Control

Control is defined as "means whereby courses are chosen and kept so as to reach goals" (Vickers, 1957, p. 4). In the discussion on goal-directed systems, the response to external pressures could be seen as a pattern of adjusting the means or process to attain better goal achievement. Control can be seen as of two types: active type and reactive type. The active type of control is related to the establishment of means or the predetermination of courses of action. The reactive type is related to feedback mechanisms and corresponds to adaptation of means as a response to the information brought by the feedback of output, which influences the input of the system. In a system, active control is related to the nature of the goals and of the relationship among the components for the achievement of the goals. It can be established directly by the system; therefore, both active and reactive control are involved in directing a course of action.

Control is, in itself, a process that can be located differently from one system to another. There are some systems with centralized control and others with decentralized control.

If control in special education is highly centralized at the state or provincial level, there probably will be a high level of interdependence among the components of the system. All local subsystems will be directly dependent on the central agency for goal-directed control as a result of the imposition of regulations. If goals are established in a more locally-determined pattern, then decentralized control can be achieved. For instance, if education and self-realization of the individual are seen as relevant to local cultural patterns, then goals ought to be established locally, even if many elements are shared among all districts. Following such patterns, a perspective on social impact of the school can be defined. If education is concerned with the social participation of individuals and more specifically participation of exceptional individuals, local means of participation ought to be defined. Therefore society, the group chosen as delivering or affecting the integration, should be the source of regulations. Otherwise centralized control will have to be differentiated in many situations to be coherent and to match local needs.

Control can be identified as a translation process and an integrative device. Through control the system translates all types of internal and external information in terms of goal-directed behavior and integrates these behaviors in the functional organization of its components.

DYNAMICS AND CHANGE

Adaptation

Hall and Fagen (1956, p. 23) have defined adaptation as the "property of systems to react to their environment in a way that is favorable, in some sense, to the continued operation of the system". Related to the concept of stability, adaptive behavior tends to keep the system within certain limits. A system can adapt itself to external (environmental) stimuli within a certain limit of change. To come back to the discussion on stability concerning special education, teachers in regular classrooms might have established, as an adaptive behavior, the process of identifying exceptional learners in their groups in order to send them to special education. If parental pressure for good academic achievement is seen as an environmental pressure, then adaptation for such teachers is to organize their teaching within some conditions that result in high achievement. Such an organization might exclude exceptional children from the regular classroom. This adaptation pattern is within the limits of the teacher role. But if the adaptation to such pressure would be to try to change the academic achievement goal to self-realization goals, then teachers may not be easily involved, since such a process of attitude change probably is out of their reach. This second type of adaptation would affect greatly the stability of the system while the first type preserves stability.

At another level, in the French classification of exceptional children the term "inadapté" has been and is currently used. Writers such as Giroux (1970), Bélanger (1970), and Hébert (1972), have pointed out the danger in special education of focusing on "inadaptation" rather than on adaptation. It appears that "inadaptation" refers to the aggregate term for disabilities such as identified in different categories of "enfants inadaptés" (exceptional children).

Adaptation calls for more than a description of conditions of exceptionality; it calls for a process of growth based on transaction between the individual and his environment.

For Mechanic (1975), it has become commonplace to consider the potentialities for adaptation in terms of the fit between person and environment. On this basis, adaptation is a property that can be attributed to all elements of the system. In special education, adaptation can be a central concept when the purpose is to prevent exceptionalities and to facilitate integration. Adaptation is then a reciprocal process affecting both the individual and the environment. This discussion illustrates the importance of ideologies in the adaptive process of special education. On one hand, adherents of the instructional school (usually evaluated in terms of academic achievement) bring pressure on the education system for a competitive, high achievement process, while on the other hand, adherents of the self-realization school ask for a cooperative human development process. Special education can be adaptive to one or the other type of pressure but not to both at the same time. To attempt adaptation to both types of pressures could result in a fallacy such as attempts to establish equality of opportunity in a system of education based on categories of learners with its well known exclusion pattern.

If the concept of adaptation is used at the levels of both external and internal stimulation, then the system could be more adaptive to the real and varying characteristics of exceptional children while reacting to external ideological stimulations. In its broader impact, this property brings the system to the task of controlling, to some extent, its environment. Such an interaction of internal and external stability should be deeply embedded in the systemic view of education or else schools could be seen as only responding to the wishes of society. As pointed out in the beginning of this chapter, the educational system and special education should be adaptive to both the social demand and the individual resource.

Learning

This concept is very close to the concept of adaptation and can be seen as one of its products. Learning can also be viewed as the elaboration of different types of relationships or components in the process of goal achievement and as an adaptive reaction to stimulation and change. Learning occurs when a system has integrated its adaptive reactions into its organized modes of action according to specific stimulation.

In some way, the evolution of special education can be seen as an example of a learning process. From the first type of intervention to the recent trends, it has been marked by attempts to evidence learning and reaction to these attempts. Different types of services have been implemented as a result of the external and internal reactions, new approaches have been established, and different modes of action have been learned and integrated in the system. This evolution has followed a rapid movement but from the latest approaches, such as instructional and social-psychological, a new type of organization seems to arise. In fact, one can think of these approaches as revolutionary when contrasting them to the current practice of special education. The learning aspect of special education as a subsystem is seen in the larger perspective of the total education system; therefore, the greater the demand characterized by these approaches, the greater the change disturbing the system and the greater should be the opportunities for system learning and adaptive response to be established in the system.

Change

As a "disturbance affecting the structure and/or process of a system" (Young, 1964, p. 78), a change can be seen in relation to time. From a specific change which affects a state of interaction (internal and external), a new state can become a source of disturbance. A system is adaptive to changes in its environment or in its own structure or process. Therefore, change can be applied to external and internal stimulation as seen in the discussion on adaptation, but changes are related to a disturbance in the state of such structure or process. The new trends in special education can be seen as great changes affecting the system as discussed earlier.

Goal

A goal can be defined as "an operational objective which a system seeks to achieve or maximize" (Young, 1964, p. 78). A system is goal-directed in the sense that its properties tend to adjust its action progressively toward maximization of goal achievement. One of the problems that faces the educational system is often related to the vagueness of its goals. As operational objectives, goals should be specific. If educational goals are identified in terms of self-realization of the individual, how operational can they be? If special education aims at the happiness of the exceptional child (in relation to a pessimistic view of the child's condition), how can it be implemented? The system components most often find their legitimization in terms of their goal-directed behavior. Then the more operational is the goal, the greater the tendency for security of the human components. Academic goals are easier to articulate than self-realization goals, just like categorical special education approaches seem simple as compared to the social-psychological approach. This study attempts to set operational goals; that is, to identify some goals within a systemic framework, in order to establish the specificity of special education goals as these are integrated in the educational system.

DECLINE AND BREAKDOWN

Stress

Any externally or internally generated force or process which threatens a system's stability in one or more respects is conceived as a stress for the system. The system's adaptive properties react to stress. For Bertalanffy (1968), stress is not only a danger to life which must be controlled and neutralized by adaptive mechanisms; it also may create a higher form of life. If adaptation is not merely a return to equilibrium or pre-stress state, it may generate learning and a growth of the system. The integration in the system of new or already existing processes or components is a growth phenomenon that tends to prepare the system for more complex modes of action. Therefore, stresses can be seen as factors in the evolution of the system.

Disturbance

According to Young (1964), the concept of disturbance is usually used to refer to external forces which influence a system. A change in the environment can be a disturbance for the system. Disturbance will in fact move a system from one state to another; they will provoke, because of the openness of the system, a change in the system itself. Just like stress, disturbance can be a factor in the evolution of the system if it does not generate an overload or excessive demands on the system. Disturbance and stress differ in terms of their impact on the system. A disturbance can be seen as a change in the environment that does not threaten the system's stability as much as stress does. Disturbances can occur in an integrated way, that is, in relation to already existing adaptive processes of the system. Stress is related to non-integrated environmental changes with some effect on the system and a rather non-predicted pressure for change.

Overload

An overload is due to "the placing of quantitative demands on the capacities of a system which it cannot handle" (Young, 1964, p. 80). System adaptation properties can neutralize external disturbance or internal stress and return the system to its equilibrium state, or they can generate learning and a new state on the basis of adaptation to such forces. Therefore, overload appears when a system cannot accept any more stresses to change.

Overload is not related to adaptation in these terms. If a system cannot adapt, then the challenge has been too great.

Overload as a concept is valuable in the weighting of external change to which the system can adapt in order to predict the degree of stress that a system can tolerate. In the process of innovation one ought to account for such a possible reaction of a system. In the case of special education, the model to be developed in this study ought to consider the impact of changes to occur in terms of the adaptive capabilities of the educational system.

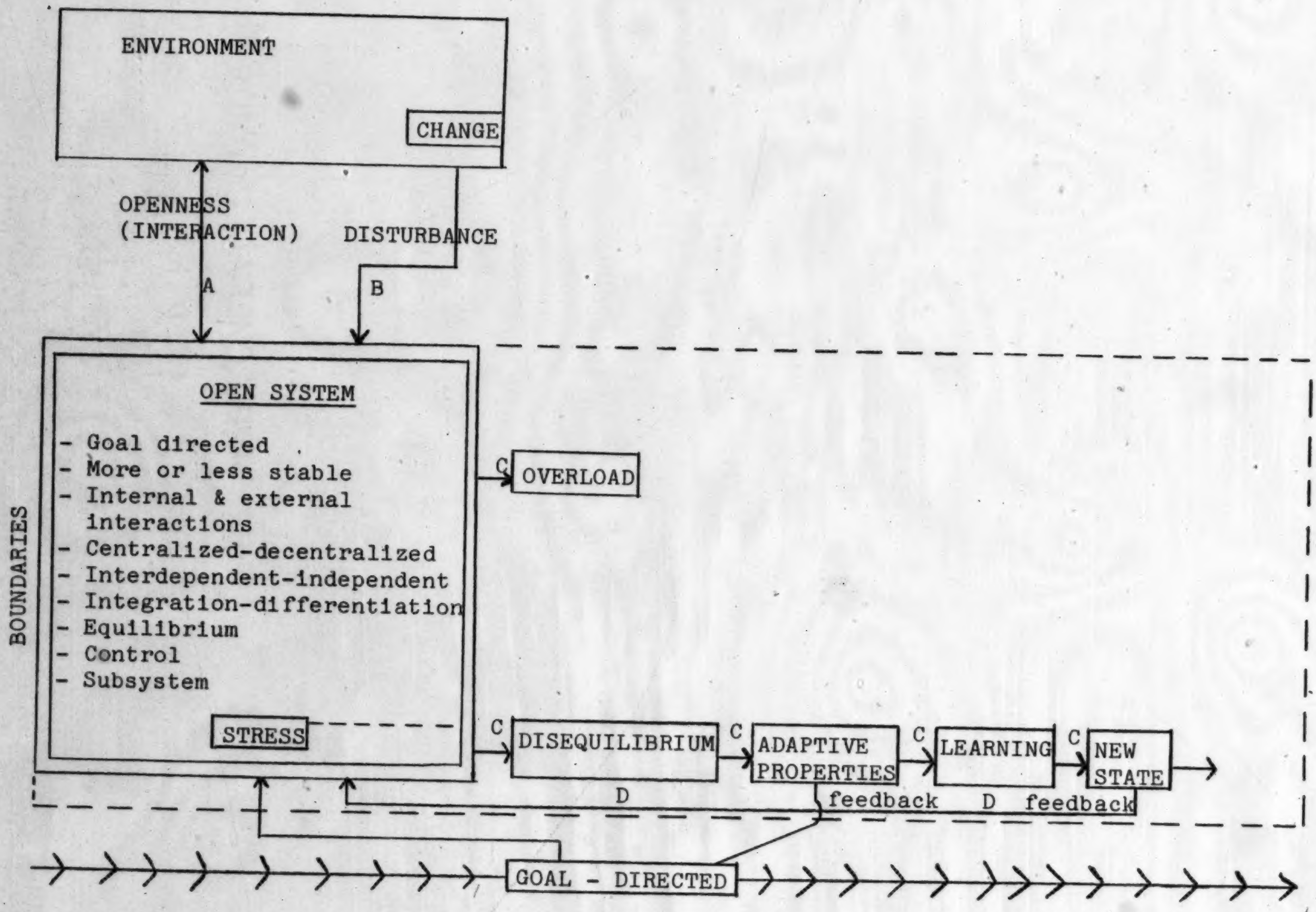
SPECIAL EDUCATION AS A SYSTEM

This chapter on system concepts was an attempt to define in general terms the nature of systems properties. It is assumed that these properties, as applied to special education and education in general, give a different perspective on current issues to be faced in planning educational services for exceptional children.

Figure 6 represents graphically a summary of the interaction of the different concepts discussed in this chapter. It indicates that the system (double line) is goal-directed, and the properties that it shows are tentatively represented by dotted lines, as the system moves or progresses from an initial state to another new state. Finally, external forces are identified as the environmental factors outside of the system. An open system is in interaction with its

Figure 6

System Properties


ENVIRONMENT
CHANGE
OPENNESS
(INTERACTION)
DISTURBANCE
A
B
BOUNDARIES
OPEN SYSTEM
- Goal directed
- More or less stable
- Internal & external interactions
- Centralized-decentralized
- Interdependent-independent
- Integration-differentiation
- Equilibrium
- Control
- Subsystem
STRESS
C
OVERLOAD
C
DISEQUILIBRIUM
C
ADAPTIVE PROPERTIES
C
LEARNING
C
NEW STATE
D
feedback
D
feedback
GOAL - DIRECTED

environment (connection A) and changes in the environment constitute disturbances for the system (connection B). The system presents different characteristics: stability, centralization, decentralization, dependence or interdependence of the components, integration, differentiation, equilibrium, control and interaction. The system has some boundaries and is composed of subsystems. Internal stress can affect the system; system dynamics leads to properties or conditions of disequilibrium, adaptation, learning, new state and overload (connection C). Finally, feedback mechanisms are indicators of the impact of changes (connection D) in the system or in the environment.

As applied to special education, the systems framework can bring valuable insights. A model of special education could be developed considering special education under the prescriptions of a systemic conceptual framework. Therefore special education should be studied as a set of relationships or institutionalized roles (student - teacher - principal - parents) is an open system. It has to be considered as having system properties, but also as being a subsystem of the educational system. The boundaries of special education follow a "cross structural pattern", in that all special education functions should be spread out in the entire structure of the educational system. Special education as a sub-set of the "instructional system" (The Reynolds and Balow concept) should be found at every structural level of the system as a functional component at those levels. Therefore, this view is very different from special education as a structural subsystem such as defined in the previously described organizational approaches. Special education as a functional subsystem is spread out in different structural subsystems; therefore, the environment of special education is the same as that of the general educational system and the environmental transaction processes would be the same for both general and special education. The integration of special education as functional components will contribute to the cohesiveness of the system. If cohesiveness is seen in terms of internal interdependence of the components, then all elements will be appropriately described as educative elements, and the educational system will not discriminate among its components but will integrate all of them in the process of goal-achievement. In this goal-directed process differentiation of components in terms of functional entities (instructional system) would facilitate the participation of all elements, therefore opening the regular education process to exceptional children. A high level of interdependence could exist between functional components (instructional system). Such an interdependence could be established on the basis of the interaction of functional components for the developmental process that is taking place at the individual level in the system. This interaction could focus on individualized determiners of action, that is to say that the functions to be performed will be determined by the individual's needs and abilities. Decentralization of the roles could provide the basis for interdependence, differentiation and interaction in the educational system. Individualized education could be based on the principle of equifinality thus making relative to the individual the ways and conditions prevailing in the developmental process. A place could exist, in the system, to satisfy every type of developmental need, therefore expanding the actual stability of the educational system. Special individual or exceptional children will not constitute a danger to the stability of the system but could be seen as generators of positive disequilibrium calling for adaptive behavior or adjustment of educational actions. This adaptation process should be the base of the educational system's growth, its openness and capacity to deal with differentiated types of individual development and learning. The system then could be responsive to internal as well as to external changes due to its expanded limits of stability; learning could occur at a greater rate. The system components themselves will be involved in a growth process due to this propensity of the system to learn. Highly stable systems with disequilibrium avoidance and low learning will affect negatively the growth of its components. Integration of special education in the educational system can then be seen as a facilitator of growth for all components. Such a growth process could bring cohesiveness in individual and system goals since at all levels the goals may be established in terms of self-realization.

Chapter IV will constitute an integration of the system conceptual framework and special education concepts. Such a conception and the discussion of its nature, will define the elements of a system conceptual model of special education.

Chapter IV

SYSTEM CONCEPTS AND A NEW APPROACH TO SPECIAL EDUCATION: THE MODEL

In the second chapter of this study, a classification of approaches to the organization of special education were developed. In the following chapter, systems concepts were reviewed, defined and illustrated by specifying several applications to special education. This fourth chapter will be concerned with the integration of the work of the two preceding chapters in what can be described as a systemic conceptual model of special education administration. The emphasis is placed on system properties to give direction to the type of relationships which, when established, will allow the adoption of a prevention ideology and lead to integration of special education processes within regular education processes. In this chapter, the conceptual premises of the model will be presented.

A new approach to special education

An administrative model of special education can be thought of in terms of organizational strategies, identified from systems theory. Therefore, the task of this fourth chapter is to establish clearly the conceptual framework which allows the establishment of such a strategy. The approach to the organization of special education that will be described in the chapter is based on a set of assumptions that are derived from several special education approaches and from system logic. These assumptions are as follows:

1. Education aims at facilitating the development of resources in the individual in order to help him to respond to external demands.

2. Education is an interacting system of elements seeking personal growth.

3. Educational practices are based on the competence of the person rather than on his deficiencies.

4. Education is based on cooperative and collective approaches to learning and self-realization. Therefore, it does not enhance strict competitive academic achievement norms but individualized developmental values.

5. Education is part of a wide variety of social services aiming at the development of the individual.

6. Special education is a normal component of the education system.

7. Parents also have needs which the public school system has a responsibility to deal with.

8. Children have similar needs, and they develop similarly. The problems that handicapped children have, like all children, must be dealt with on an individual needs basis.

9. Exceptionality is a temporary mismatch between individual realities and social demands and is due to the interaction of a wide variety of variables.

10. Exceptional children, like all children, will achieve a better development in interacting with other children different from them.

These assumptions are presented as being facilitators of special education services that are hypothesized to result in better practices than provided by the current services. As such, they can be seen as underlying conditions to be met in order to implement the systemic approach with which this study is concerned. These assumptions as they are presented, constitute a set of basic principles of the new approach. They still have to be examined in terms of their practical implications and integrated in a comprehensive definition of special education. This task will begin with the establishment of a view of man that will emphasize a developmental process and define the nature of exceptionality. Then, the nature of educational goals and of the place of special education will be examined. A later part will define the functional attributes of the educational system components.

Finally, system process will be defined and practical means of organization identified.

This chapter is divided into three major sections. First, the nature of man is discussed under a systemic perspective, this part of the chapter is devoted to the assumption that any educational practice is governed by a view of man. Therefore the conceptual model of special education is also related to a specific view of man and this conception is developed in this section. A definition of exceptionality is also derived from this discussion. Secondly, a discussion on educational goals is presented. Since systems are goal oriented, it appears of significance to develop this theme. Thirdly, a review of specified special education functional component roles is made in order to organize some of the principles of the two preceding sections into a set of practical means of organizing the special education delivery system.

THE NATURE OF MAN

The open system man

According to Thompson (1970) everyone uses some "model" of man, or perhaps several models of man. Whether they are explicit or not, man does form expectations about how others will behave toward him or how others will respond to something he does. The view of others also determines one's own mode of action; therefore such a model, in some ways, determines one's self-perception. In an attempt to discriminate among several models, Thompson has identified three basic models of man. One rests on the assumption that man is governed primarily by conflict, and another approaches man as machine; the third is more recent and perhaps less well defined but can be labeled as an open-system approach to man. The conflict models of man have generally been associated with clinical psychology and in fact dominated the medical and categorical approaches in special education. The second borrows its mechanistic nature from the stimulus-response psychology or the behavioral school. Normalization and instructional approaches in special education have been marked by such a view of man. The third model of man, the open-system, is characterized by a transactional view of man. The focus is shifted from man as a passive agent, who reacts to stimuli to man as an active agent. Thompson defines this third model in these terms:

> The open-system strategy thus views man as purposive, as interdependent with the physical and social environment as he pursues his goals. This requires not only that man develop mental processing capabilities - for thinking, deciding and so on - but also that he acquire information and beliefs which allow him to "know" the persons and things in his environment and to cope with them. (Thompson, 1970, p. 13).

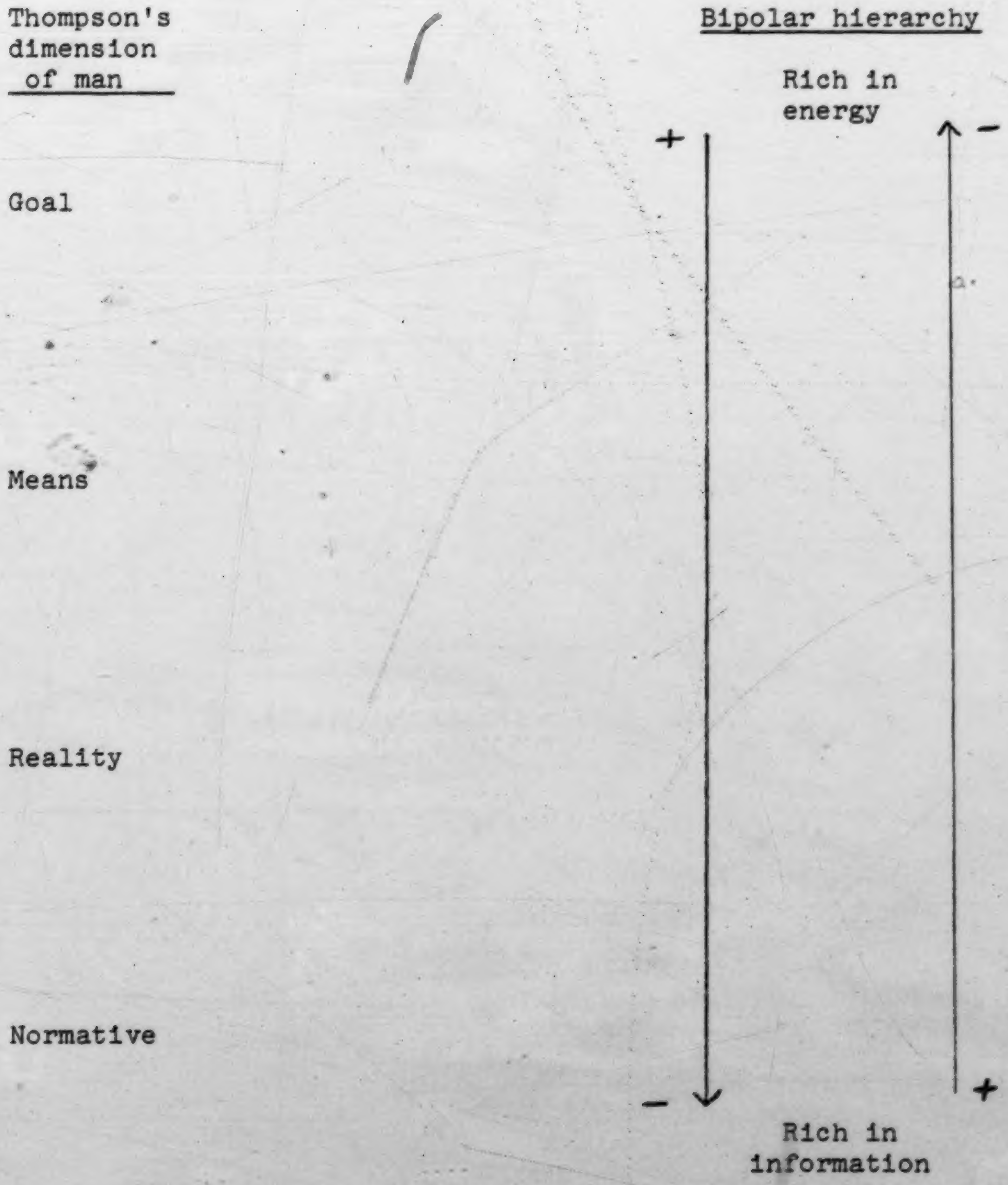
Thompson goes further and identifies four dimensions of man which permit him to be flexible, adaptive, and realistic in an unknown future. There is a goal dimension by which man grows, develops, or works for goals that are his aspirations, ambitions, or targets. Man's actions are purposive; they are goal-directed. Next there is a means dimension which relates to the modes or ways used to strive for the goals. These means are based on skills, know-how or abilities that man acquires throughout his development. Acquisition or development of mental processing capabilities for thinking, deciding and feeling are part of the inherent abilities that facilitate the selection of appropriate means to the goals. Thirdly, there is a reality dimension related to an understanding of the environment. Goals and means give man something to work for and tools for doing so; but which goals are available at a particular time and which means are appropriate in a particular place remain to be determined. This dimension is directly related to the interdependence of the individual and his environment in the goal achievement process. Reality aspects lie in the capability of man to sense in the environment the facilitators of his self-realization. Finally, there is the normative dimension which is the guide or the regulator of man's behavior. The guides are then norms that control the action. These norms are based on the values to be found in the culture of the specific environment where the purposive action takes place.

In Figure 7, a hierarchy is developed based on Thompson's dimensions. This bipolar hierarchy shows the nature of the elements that facilitate the development of each dimension. If the development of the person is seen as the acquisition of these four qualities or dimensions, then the action of any growth agent (education agents) must be designed to shape the content of those four dimensions in the child. In Figure 7, an attempt is made to polarize these dimensions from richness in information and richness in energy. This bipolarity refers to some extent, to the content of the dimensions. The goal dimension is in the individual at the beginning of all action; it is thought to be rich in energy. Organic elements are involved in the individual establishment of goals, since personal needs are at this state the basis for goals identification. Information at this stage is often very low, since man is not always aware of the specific needs he tends to satisfy; it is more of an internal drive nature.

Energy refers to the biological components or physiological organization given at birth as functional premises of all action. The first goal in the life of a person can be of an instinctual nature. The diversification of the organism's functions will generate more sophisticated needs and goals following a pattern of maturation.

Figure 7

Energy and Information Characteristics of Dimension of Man


Thompson's dimension of man
Bipolar hierarchy
Rich in energy
+
-
Goal
Means
Reality
Normative
-
+
Rich in information

The means dimensions can be thought of as the beginning of search about modes of action that lead to need satisfaction. This search is based on energetic elements related to the individual's capacities and also information as to the available external elements. The knowledge of the exogenous facilitators of need satisfaction is based on information about modes of satisfaction as given by one's experience with environmental interaction.

Thirdly, there is the reality dimension which is more heavily loaded with information as compared to energy. The degree of realism of the means, which are ways of goal achievement, is based on information to be gathered from the environment, related to the learning of means already inscribed in the environment. In this sense, the reality dimension can be seen as more externally and information oriented when compared to the first level of the goal dimension, which is almost totally internally and energetic oriented.

Finally, the normative dimension is based on man's possibility for gathering information on the nature and types of values that are approved in his environment. Such information then allows an adjustment of means and allows review of their realism in concordance with prevalent values.

This hierarchy can be illustrated by the simple example of the child who tries to attract a teacher's attention to his work. From a need for self-respect, which is energetic in the sense that it calls for several mental capacities such as thinking, the child being goal-oriented, identifies specific means. He decides to ask, verbally and loudly, for the teacher to come to his desk and look at what he has produced. This means refers to energetic factors (physiological or biological) and also to informative factors (it is a way to be perceived by others). Realism then refers to the judgment made by the child on the efficacy of such a means based on the observation that it has previously worked well. Finally, the child learns that the rule in this class for such a situation is to raise the hand for the teacher's attention. The normative dimension then, is based on information about the rules that prevail; in this sense it is highly based on information. This behavior will be changed to hand raising if the normative dimension is developed.

This very simple example is illustrative of the type of action to be taken by educators in order to develop the content of this dimension in the individual. The shaping of open-system man dimensions should discriminate between energetic and informative content and assure that they are hierarchically presented. Further analysis has to be made of such content in order to understand more deeply the nature of the task.

The open-system man model is not only a model of human development, it is a constant definition of man's action from birth to death. It is a process that man is subject to throughout his entire life; everyone is involved in a growth process, every day of his life. All men, as open-systems, develop the qualities or capacities to interact with their environment while achieving self-actualization. Self-realization and self-actualization are treated in this study as synonymous. They refer to the development of capacities and to the acquisition of information for personal needs satisfaction.

A systemic view of needs

The emphasis in this study was on educational purposes. Nevertheless, for such purposes, an overview of human development patterns and the significance of needs is useful and leads a translation of such views into learning-teaching activities. The analysis that follows is based upon the potentialities of an open-system view for facilitating a description of the teaching-learning process. The purpose is not to contribute to the field of psychology, or other related domains, but to education.

The open-system man strategy shares some of its assumptions with the organismic theory which is one school of thought in psychology as represented by the works of Goldstein

(1939), Angyal (1941) and Maslow (1954). The principal features of the organismic theory, as presented by Hall and Lindzey (1956), can be summarized as follows:

1. Organismic theory emphasizes the unity, integration, consistency and coherence of the normal personality. Organization is the natural state of the organism; disorganization is pathological and is usually brought about by the impact of an oppressive or threatening environment, or to a lesser degree by intraorganic anomalies. This first point can be related to the socio-psychological view of special education in terms of the similarity of assumptions concerning the nature of exceptionality. In some ways, it is marked by a positivistic view of the person and by the major role of the environmental transaction. This last point is shared with the open-system man strategy.

2. Organismic theory starts with the organism as an organized system and proceeds to analyze it by differentiating the whole into its parts. A part is never abstracted from the whole to which it belongs and studied as an isolated entity; it is always considered to have membership character in the total organism. The nature of exceptionality should never be studied alone in the individual without careful attention being given to the entire system. The proliferation of special classes can be seen as a pitfall of isolationism.

Instead of looking carefully at the educational system as a whole, some of its members, (exceptional individuals) have been placed in separated units. Such a practice tends to identify the abnormality as a feature of the individual member only. Organismic theory differs from this by suggesting that the whole (all children to be educated) should be the point of reference.

3. Organismic theory assumes that the individual is motivated by one sovereign motive, self-actualization or self-realization, which means that man strives continuously to realize his inherent potentialities by whatever avenues are open to him.

4. Organismic theory regards the individual as an open system and emphasizes the inherent potentialities of the organism for growth rather than the influence of the external environment. In terms of this approach there is nothing "bad" in the individual, it is made "bad" by an inadequate environment. Again, this argument has much in common with the tenets of the socio-psychological approach on the nature of exceptionality.

5. Organismic theory feels that there is more to be learned from a comprehensive study of one person than from an extensive investigation of an isolated psychological

function abstracted from many individuals. If we are trying to know what a person is trying to actualize, we must be familiar with what he likes to do and what he has a gift for doing. This is a competence based approach.

The organismic framework as described shares common characteristics with the open-system man strategy. For Werner and Kaplan (1973) there are two general assumptions basic to any organismic approach concerning the nature of behavior.

> One of these general assumptions is the holistic one, which maintains that any local organ or activity is dependent upon the context, field, or whole of which it is a constitutive part: its properties and functional significance are, in large measure, determined by this larger whole or context. The second general assumption is that of directiveness: it is assumed that the various organs or activities of an organism function in the realization of ends immanent in the activity of the organism as a whole. (Werner and Kaplan, 1973, p. 148).

These two assumptions clarify the purposive interaction of elements in the individual as a system. They define with the other characteristics of the organismic theory a transactional view of man.

According to the advocates of the organismic theory, the goal dimension of the open-system man model finds meaning in the purpose of self-realization of the individual. Self-realization can be analyzed in terms of energy and information in order to more fully discriminate its meaning and extent as a developmental process.

Richness in energy refers to the elements at the basis of any individual action as generated by one or several needs. The organism is composed physiologically of energetic components. For the accomplishment of biological function, for example, a transformation of energy takes place and is by itself a function of the organism. These functions call for specific capacities which may be latent potentialities. This actualization generates some needs. Self-realization can then be seen as the maximum use of one's capacities in order to satisfy one's needs. In this sense self-realization is neutral; it does not prescribe what is the nature of the product but the process that should take place. Richness in information refers to environmental conditions. For the individual, using its potentiality or capacities for self-realization is only one aspect, this process also necessitates information inputs of an external nature. These inputs are fed in as information which assist the individual in the process of self-actualization. Richness in energy and in information can be related to specific needs.

An operational list of needs should then be the basis for facilitating one's self-realization. If the target is the satisfaction of one or several needs by the development of underlying capacities, then the goal of self-actualization is achievable. Herbert Goldstein (1969) has elaborated a set of needs that can be related to the open-system man strategy. For Goldstein there are three areas of needs, which were modified for this study (Figure 8) into four areas. The modification lies in the addition of a fourth area - the cultural aspect - to identify the need for social adequacy which was contained in the social aspect in Goldstein's model. This modification permits a one-to-one relation between these areas and the four dimensions of the open-system man as shown in Figure 9. In this figure, the four needs areas are related to the four dimensions and, therefore, are also related to the hierarchies of richness in energy and information. Physical needs are more energetically oriented and cultural needs are rich in information.

Figure 8 has been derived and adapted from Goldstein (1969). He has reduced the individuals' needs to fourteen areas which have been postulated as part of his motivational system. These needs areas are both interdependent and interaction. This model will be used in the discussion on curriculum later in this chapter. At this stage an analysis is made of the relation established in Figure 9 between Dimensions, Needs and the Bipolar Hierarchy.

Figure 8

Needs Areas (adapted from Goldstein, 1969)

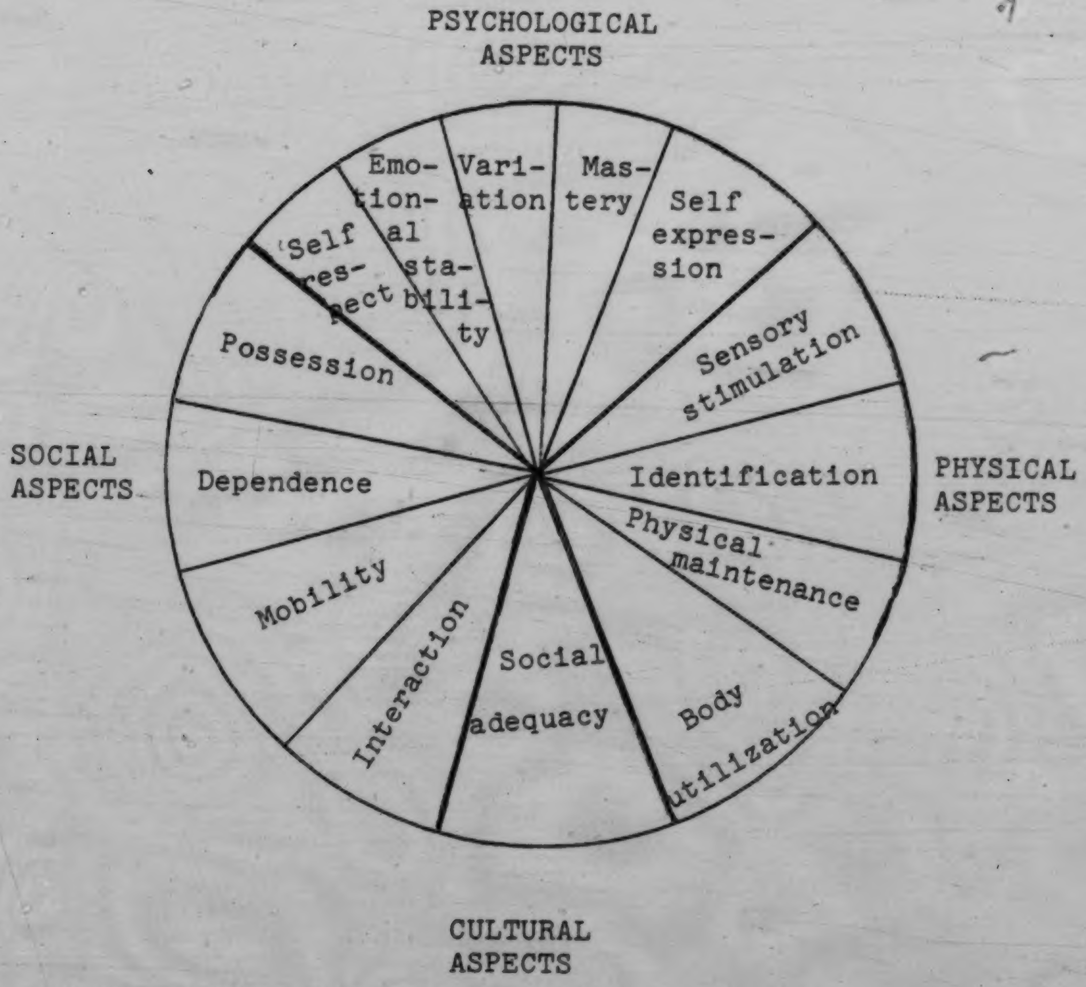
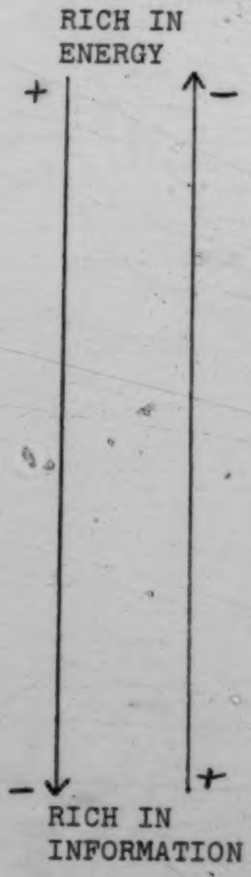

PSYCHOLOGICAL ASPECTS
Emotional stability
Variation
Mastery
Self expression
Self respect
Possession
Sensory stimulation
SOCIAL ASPECTS
Dependence
Identification
PHYSICAL ASPECTS
Physical maintenance
Mobility
Interaction
Social adequacy
Body utilization
CULTURAL ASPECTS

Figure 9

Hierarchy of Needs

*Four dimensions of open-system man	**Needs areas
GOAL	PHYSICAL
MEANS	PSYCHOLOGICAL
REALITY	SOCIAL
NORMATIVE	CULTURAL

Bipolar Hierarchy


RICH IN ENERGY
+
−
−
+
RICH IN INFORMATION

* adapted from Thompson (1970)
** adapted from Goldstein (1969)

One can think of self-actualization, at the lowest end as a process of achieving physical competence. Physical elements are the first vital component of the individual. From a strictly biological point of view the first need to be identified is thought of as being related to physical maintenance or, in other terms, the struggle to stay alive and in good health. At this point one can speak of an energy-related process of growth. Sensory stimulation, body utilization, and physical maintenance are highly energetic, while identification calls for more informational data. Identification necessitates the development of perceptual motor capacities which are energetic but also involve, in part, external information that relates self-discovery or identification to the perception of other human physical entities. For Ausubel (1957) a particular perceptual experience always reflects interaction between internal and external determiners. External determiners include physical stimulus and contextual factors while internal determiners relate to physiological and psychological development factors. Physical needs are related to the goal dimension not because goals are only of a physical nature, but because certain physiological conditions ought to be present for the establishment of goals. The individual must assume an "élan vital" in order to be able to set some targets. However, goals are also related to psychological, social and cultural aspects and are involved with the interaction of the other dimensions of open-system man. At this stage one is not dealing with the nature of the goals but with the process of setting them. To be able to fix some goals one ought to have primarily the physical (energetic) capacities to do so. The nature of each goal will be dependent on the three other dimensions as they affect the goal in operational (means), efficacy (realism) and adaptation (normative) terms.

At a second level, the psychological needs are associated with the means dimension. This relation again can be expressed in terms of the bipolarity of energy and information. As with the physical aspects, the psychological needs are composed of capacities that are energetic. These capacities are inscribed in the maturation process of the physiological aspect of man. At this stage the means or the modes of need satisfaction or goal achievement, are internally defined; that is to say, they are derived from the interplay between the individual physical, emotional, and intellectual capacities. The means that are identified are not defined in terms of their external social or cultural value, but rather in accordance with the personal capacities and past experiences as determinants of the maturation of the person. Past experiences and the learning that took place is a beginning of the elaboration of a set of data about external factors. As such these data are information which in association with the capacities or energetic factors constitute the psychological aspect. Therefore, psychological needs are highly dependent on vital functions in the person but also by the developmental process and learning activities they are related to external information. For example, the need for self-respect is directly related to capacities of an emotional-physical and cognitive nature. The person, in order to perceive himself, must have developed capacities of sensorial perception, cognitive discrimination, and emotional feelings; however, external information on adequacy and usefulness are also involved in this need. Means are not limited to psychological aspects but are marked or influenced strongly at this stage of self-realization by the need for emotional stability, mastery, self-respect, self-expression and variation.

With the third dimension a shift is made to aspects that are richer in information than in energy. These aspects tend to be externally defined. The reality dimension and the social aspect of the needs areas are both highly related to environmental factors. Reality was previously presented as being related to the availability of goals and appropriate means in specific environmental conditions. Availability of goals refers to the possibility of need satisfaction in a specific context and appropriateness of means refers to a three element equation between the need, the means (as appropriate to the need) and the environmental conditions.

If establishment of needs and means has been based on energetic factors and little on information, a good knowledge of the environment is needed at this stage in order to realistically pursue the goal. Social needs such as possession, dependence, interaction and mobility are all in reference to other individual. If the individual gathers information about the condition of the environment, then the realism of the modes of action identified for the satisfaction of his needs will be greater. His actions will be better adjusted to the specific conditions of the environment. At this level one can think of reality as a social integrative dimension. It is at this level that actions are taken in relation to the environment. Reality of action can be referred to as the adaptation of individual actions to environmental transaction. Focusing on the person as a system of needs, permits further definition of exceptionality, as will be developed in a later part of this report.

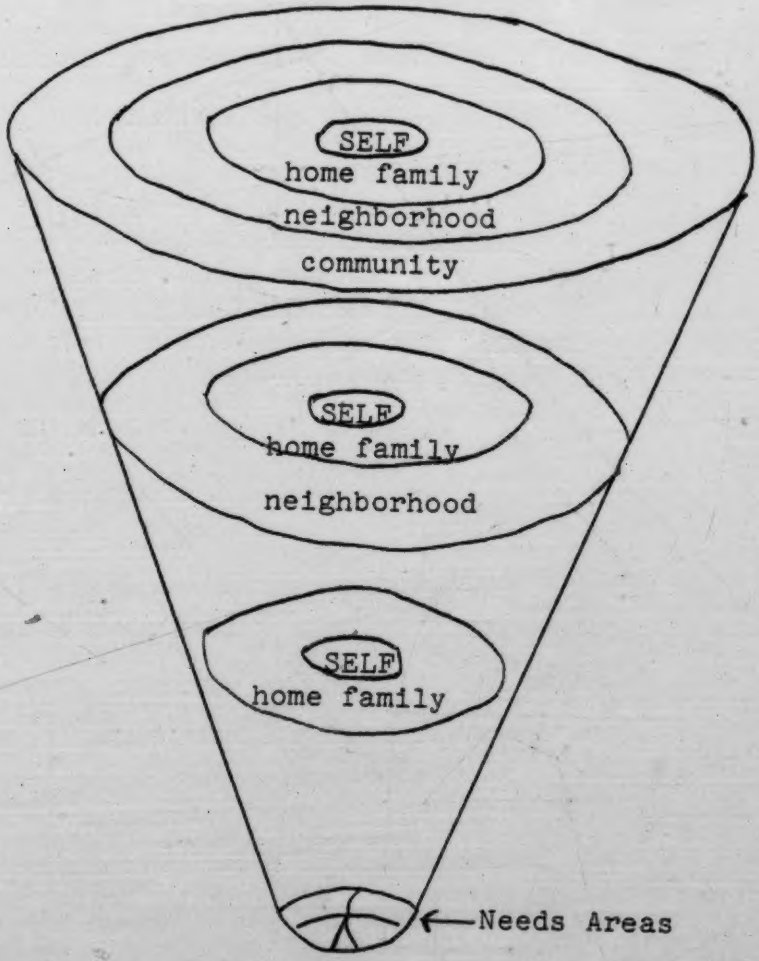
Finally, at the highest level of information, there are the normative dimension and the cultural need. The need for social adequacy corresponds to the normative dimension. In relation to the individual, the following question is asked: "According to the values of the cultural setting or environmental values, how adequate and realistic are the means and goals defined by the individual?" These values are the norms that the individual gathers from his interactions and partially establishes the adequacy of his action. They are highly based on information. Values are not physical, they can be of ethical or moralistic or regulative nature. As such they can be of an active or of a reactive type. Active refers to the integration of values by the person, they are acquired by the individual as a result of maturation. Reactive values are related to a feedback mechanism that assists the individual in adjusting to societal or external values. As a result of the educational process, a person tends to incorporate, in his mode of action, several values that will be at the base of his behavior. Through interaction he will be confronted by other values that he will have to integrate with his own if he is to be adapted to the specific environmental conditions with which he is involved. Social adequacy is a need that can be satisfied only if a reasonably consistent perception of the environment is achieved. This is especially true when the environment is viewed as having a specific set of values to which one's actions must be adapted. It necessitates a pre-established knowledge of values and the capacity to acquire feedback of self-action in the context of those values.

The bipolar hierarchy has no chronological value, since the dimensions and needs may be activated at any time throughout life. It has educational value, because the factors accounted for in an energetic-information classification, are thought to have potential for strategies of personal self-realization. If education aims at the achievement of self-realization, facilitators of such ends should be developed. Energetic factors ought to be developed in the person and the gathering of information for the individual ought to be facilitated. These developmental actions can be the two major dimensions of the educational task. Knowing that both elements are at the basis of any developmental process, educators ought to be involved in interventions to assist the individual in the maturation process. Educational practices should first aim at the development of capacities in the individual and his possibilities for gathering information by placing him in informative situations. Curriculum development then should strictly be organized under such purposes, and academic subjects should appear as means and not as ends in such a model of education. In the latter part of this chapter, the impact of this model on curriculum planning will be analyzed.

In the previous discussion, a system of needs as interacting elements of an open-system model of man has been developed. Another factor has to be specified, namely, the interaction with environment. The relation with the environment follows, in the maturation process, a certain expanding movement. For Goldstein (1969), the environment of the person expands with the diversification of his transactions. Figure 10, represents Goldstein's model of the child's expanding environment

Figure 10

Model of the Child's Expanding Environment and Environment Components (Goldstein, 1969)


SELF
home family
neighborhood
community
SELF
home family
neighborhood
SELF
home family
Needs Areas

and the environment components. This model has three important dimensions according to the author.

> The inverted cone represents the expansion of the growing individual's world. This dimension takes into account the increase in the number of transactions the individual has with social, psychological and physical phenomenon as his mobility increases. Thus, it brings into focus the second dimension, the delineation of certain environments through which the individual passes in additive fashion on the road to maturity. These environments are shown by the concentric circles. The third dimension, the vertical progression of each environment is consistent - the persistence of knowledge, facts, and skills is represented by the vertical broken lines. This is based on the assumption that one never really abandons experiences as one matures but instead adds to and builds upon these and thereby becomes eligible for the "next" even more complex environment. (Goldstein, 1969, p. 5-6).

This last model adds to the definition of the "self" at the individual level a dynamic transactional pattern of self-realization. A lot more can be said on the maturation and the developmental process. The simplified definition of man developed in this study does not aim at a complete description of man, but rather to the establishment of an operational definition of educational practices that will relate to working toward diminishing "exceptionalities". The understanding of the child as an open-system of interacting needs based on energetic capacities and informative data developing in a expanding environment is congruent with a definition of education as a process of self-realization. This view or model of man, based on the integration of several currents of thought in the humanities, ought to be instrumental in setting the goals and processes in the school social habitat.

The nature of exceptionality

From the open-system man model, as discussed in the previous section, a definition of exceptionality can be established. Furthermore, this definition will be associated with the nature of adaptation rather than with the concept of "inadaptation".

Exceptionality may be seen as a condition of marginality and described in terms of levels of involvement. Marginality can be defined as a condition that prevails in certain elements of a system, when these elements are not directly involved in the interactions within the system. This concept differs from the systems concept of independence where elements do participate in the relationship by being goal-directed but not in interdependence with other elements. Marginality refers to the fact of being in the "margin", somewhere out of the interaction but not in the environment. Marginality has been developed as a concept in the field of anthropology and is closely related to the phenomenon of cultural assimilation. If assimilation refers to integration then marginality can be understood as a non-participation or negative segregation compared to positive segregation. For the understanding of exceptionality, it is hypothesized that there are two levels of marginality in the process of maturation. The first level refers in the expanding environmental model to the "self" level. In the first place exceptionality can be of an "internal marginality" nature. Internal refers to a marginality among the needs of the person. In the process of maturation or self-realization certain needs have not been involved in the interaction with the other needs due to the lack of capacity development or information gathering. Personal development has grown from an incomplete interaction of needs creating an overemphasis of certain needs and generating disturbance in the growth process thus creating the first level of exceptionality. Preventive action at this stage ought to involve facilitating the development of capacities by a comprehensive action on needs areas to avoid this marginality. All needs areas should be touched by educational programs. The individuals identified as "exceptionals" or "inadaptés" are not currently defined primarily in this perspective; they are defined mostly in terms of external marginality.

Many people have never achieved the integration of their needs but are described as well-adapted persons. For others, this first level of exceptionality generates the other type or second level type of exceptionality: the external marginality type. External marginality refers to the reality and the normative dimensions. Internal marginality was more at the goals and means level as defined earlier as being internal, in the individual; this second type of exceptionality refers to the adaptation of means of need satisfaction to the conditions of the environment. Exceptionality or "inadaptation" are better defined in terms of environmental relationships identified by the socio-psychological approach in special education. At this level, exceptionality is defined by the society as a mismatch between the individual actions or conditions and societal norms. As has been indicated, an individual can be internally marginal and externally adapted but also internally adapted and externally marginal depending on the openness of the social system in which he lives. In an attempt to avoid internal marginality, it can be hypothesized that greater development of capacities will occur. Creativity is an example of a capacity and can be developed to such an extent that the person will almost fall within the external marginality type of exceptionality as may be the case with gifted children. This is a case of personal internal adaptation while external marginality is developed.

This definition of exceptionality seems to be very pessimistic. It tends to make us think that society will never be able to integrate or open its norms for the participation of some highly self-realized person but that is not the case. Self-realization is culturally oriented and will always take place in a context where pressure from the reality and normative dimensions will be operative. Society has a typology of adapted personal characteristics that are defined for the "average man" or the well known "enfant moyen". The limits of personal characteristics are relatively stable but nevertheless they do change in society over time. This marginality definition of exceptionality is optimistic in its implication for preventive actions, preventing exceptionality through the organization of a school based on all personal needs and also presenting, by the organization of a school, information open to differentiated forms of participation. Education ought to be systemically oriented toward the integration of capacities development and needs satisfaction and open to the individuals that have marginality problems. In this sense, a process of integration that differs from what has been previously known in special education as integration or segregation is established. All children are part of the system, in this sense there are no limits to integration because special education is itself part of the system as a regular component, not identified as "special". Segregation then can become, as in a systemic process, a positive differentiation process that tends to offer to everyone facilitation of growth, or facilitating systematically, as a goal for the system, the self-realization of all its components.

Growth for everyone and adaptation

Open-system strategy sees man as a continuously growing organism. In fact, the four qualities or dimensions that man ought to develop are actively used throughout his entire life. Therefore, if one conceptualizes the process of education taking place in a context of social collectivity, in a social habitat, the school, then the focus is on a set of individuals in interaction. All components (human entities) in the social system are implied to be in a process of growth. The educational interaction is often defined as a one-way growth process, defining the child as the only growing entity in the school while the other elements are limited to provoking such evolution. This conception has created an incompatibility between what can be identified as student goals or needs and system or teacher goals; teachers are primarily defined by their adherence to system goals. Stanford and Roark (1974) have described this phenomenon well:

> A basic assumption regarding American education is that there is a fundamental difference between the goals and procedures of teachers and those of students. It is assumed that ideally

> teachers' goals are centered on changes in the students - usually called learning, attitude or character building and skills development. Students' goals, it is assumed, are to change or to be changed as much as possible through those processes defined as learning and development.

The consequences of the presumed differences between students' and teachers' goals are seen by these authors as being dramatic:

> Teachers are supposed to change others (or, in more humanistic terms, to facilitate change), with no concern for self-change. Students are supposed to change themselves or to be changed, with little regard for change in others. If teachers were participants in learning, it would tend to reduce the problem of student disregard for each other and to foster a community of learners who care for each other. The present practice tends to set the students apart from each other as well as from the teacher. (Stanford and Roark, 1974, p. 9-10).

For the authors, this misconception of teaching has many implications:

1. Students immediately assume that they must guard against being abused by unfair work demands, by grades and by being made to appear stupid. Teachers assume that students must be taught, that they are probably not very interested and that it is the teachers' responsibility to ensure that they learn. Hence, students feel they must resist for self-protection and teachers feel they must push if they are to do their jobs. A cold war is already being waged before teachers and students even know each other;

2. Traditional distinctions between teachers and learners leaves students without a model to follow in their efforts to learn; and,

3. This leads to misconceptions of bad knowledge being acquired and to emergence of illusions concerning the amount and type of knowledge possessed by the teacher.

According to Stanford and Roark:

> ... teachers and students should have the same basic goals, and that differences, if any, should be in emphasis and methods. In any given educational endeavor all participants should share the same basic goals even though there may be a division of labor and wide variations in procedures and specific objectives. Teachers should still take responsibility for the classroom but they will do it as participants in a community of learners engaged in a joint learning venture. (Stanford and Roark, 1974, p. 10).

The community of learners defined by Stanford and Roark, is in fact the recognition of a growth process applied to every element in the educational endeavour. Students and teachers and also the principal, the resource persons, the parents, and others form this community. Also, for Shapiro and Biber (1973), "teaching in the developmental-interaction approach to education, perhaps more than other educational approaches requires the integration of personal and professional capacities". Beery (1974, p. 5) shares the same preoccupation:

> People of any age need growth environments. Nowhere is this more true than in education. If a teacher is to provide stimulation and meaning and enjoyment for her pupils, then she must be working in a stimulating meaningful, enjoyable environment - a growth environment.

Beery emphasizes the role of the school principal in a growth process in what he identifies in a model known as the catalyst process. At its simplest level graphically, the catalyst process is a circular interactive process as shown in Figure 11.

> Two or more people agree to engage in a process of mutual growth. Each starts with self (as opposed to each trying to change the other) and asks others to provide information and moral support in this self-development effort. They create an environment (e.g., opportunities to interact constructively) which will enhance their efforts to grow together. (Beery, 1974, p. 5).

Figure 11 also specified the foundation of this approach as a set of positive assumptions about people which the group will try to support in their day-to-day behaviors. According to Beery, belief in self and others leads to creation of a democratic environment in which principal growth facilitates teacher growth which in turn, facilitates pupil growth. Finally, the catalyst process model is presented in Figure 12 showing major steps in a sequential manner. In practice, sequential activities often overlap one another. In this model "Data base" refers to objectified information to help people know where they are doing well and what needs to be

Figure 11

Beery (1974) Basis of the Catalyst process

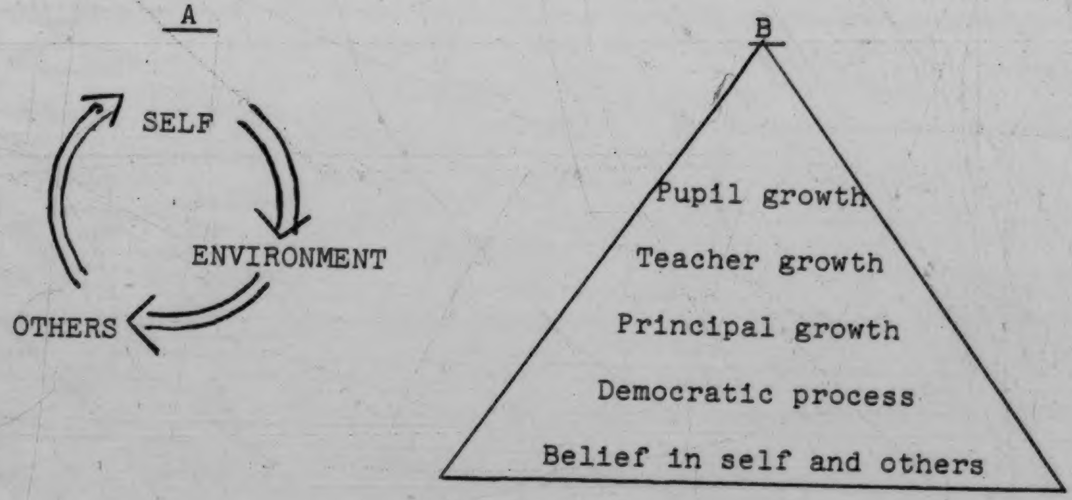
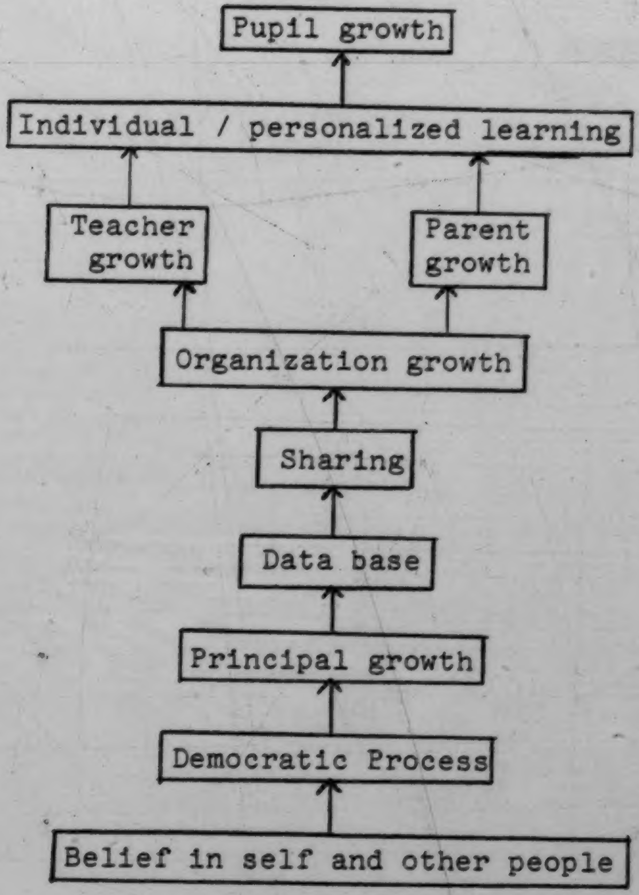

A
SELF
ENVIRONMENT
OTHERS
B
Pupil growth
Teacher growth
Principal growth
Democratic process
Belief in self and others

Figure 12

Beery (1974) Catalyst Process


Pupil growth
Individual / personalized learning
Teacher growth
Parent growth
Organization growth
Sharing
Data base
Principal growth
Democratic Process
Belief in self and other people

worked on. "Sharing" refers to the exchange of ideas and support among peers. The catalyst process is highly compatible with the open-system man strategy and the systemic view of needs and self-actualization. If growth is defined as self-realization, and belief in self and others in terms of an open-system strategy, then organizational development will emphasize a self-actualization or need satisfaction process for every element in the interaction or social system.

The creation of a growth environment and the conditions identified in the discussion on the nature of man will tend to facilitate the adaptation of every member of the educational system. It is important to remember McGrath's definition of adaptation: "Adaptation must be considered in terms of the relationship between external physical and social demands on the person and his resources to deal with these" (McGrath, 1970). Therefore, potential for adaptation can be considered in terms of the fit between person and environment. The catalyst process follows the open-system logic by showing how teachers, principals, and parents can generate action toward the establishment of a growth environment which is one that facilitates adaptation by developing in the individual the capacities to interact and learn and by presenting with greater realism the environmental demands experienced by the individual. The focus on individualized actions will also facilitate the adaptation and therefore the participation of all children, teachers, parents, and administrators. If this takes place, it will be possible to speak of integration; the integration of every component of the system in a community of growth. In this sense it can be hypothesized that organizational needs as expressed by organizational goals would tend to be similar to individual needs, thus bringing a closer relation between Getzels's (1958) nomothetic and ideographic dimensions of activity.

Administrative theory in this field has often dichotomized the ideographic and nomothetic dimensions as sometimes bringing conflict or at least not specifically oriented toward the same goals. In education, if the primary goal is self-actualization and a growth process is established, the organizational goal will tend to be identical to the individual goal, because the organization goals will focus on individual growth, thus facilitating the integration of everyone into the developmental process. The actual level of deficiency of self-actualization in the schools ought to be changed in order to achieve a cooperative learning process.

EDUCATIONAL GOALS AND SPECIAL EDUCATION

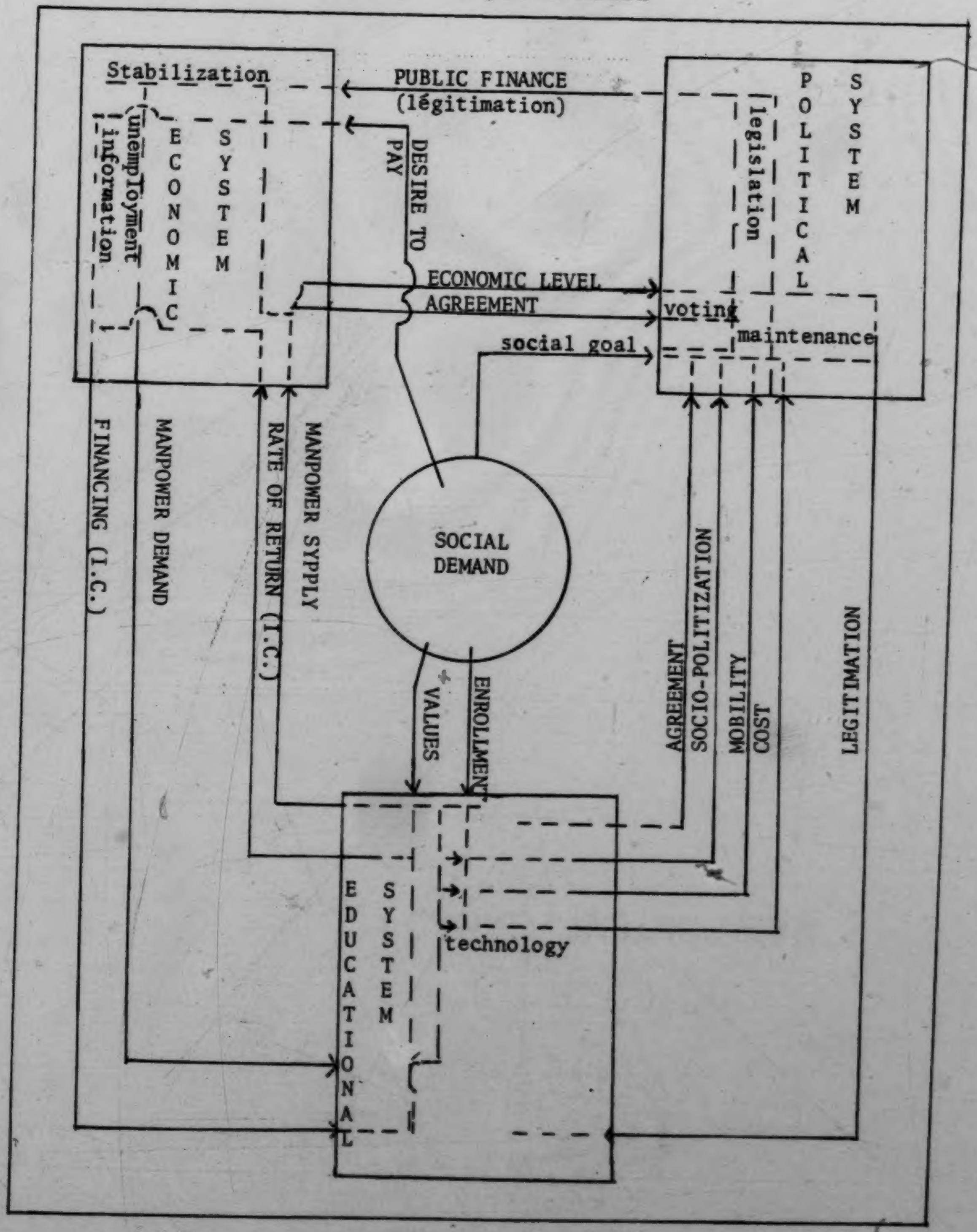
As a system, the educational social institution can be conceived as purposive. Educational sociologists have studied the teleological dimension of education from different cultural perspectives or ideological and social conditions. Much has been written on the social role of education as a social institution. In this study the nature of educational goals will be analyzed in terms of the systemic process of goal development and also on the type of goals to be developed according to the philosophical framework related to the discussion on the nature of man. From such a goal analysis it will be possible to clarify the place of special education in an educational system devoted to self-actualization principles.

Goals development process

In a previous study, (Gélinas, 1972) an attempt was made to relate different social institutions in a comprehensive intersystem model of educational decision-making. The model developed in that study is reproduced in Figure 13. The process of goal determining is seen as transactional. In fact, this transaction can be conceived as implying four interdependent entities or systems. On the social institutional point of view the economic, political and educational systems are linked together by reciprocal influences as illustrated in Figure 13. There is also a central entity called the social demand that has some connections with the three systems. This intersystem model indicates that educational goal development is affected by a transaction between

Figure 13

The Intersystem Model


Stabilization
unemployment
information
ECONOMIC
SYSTEM
PUBLIC FINANCE
(légitimation)
DESIRE TO PAY
POLITICAL
SYSTEM
legislation
ECONOMIC LEVEL
AGREEMENT
voting
maintenance
social goal
FINANCING (I.C.)
MANPOWER DEMAND
RATE OF RETURN (I.C.)
MANPOWER SYPPLY
SOCIAL DEMAND
VALUES
ENROLLMENT
AGREEMENT
SOCIO-POLITIZATION
MOBILITY
COST
LEGITIMATION
EDUCATIONAL
SYSTEM
technology

elements of economic, political, educational and social demand nature. This process actualizes the legitimation of the official educational goals since the educational system seeks for such legitimation from other systems. The educational system develops its own goals but they are to be confronted by the interests of other systems, for example, the political system goals are determined to some extent by the educational system and so on. The connections identified in Figure 13 indicate the level of interdependence between the systems.

An open system is by definition related to its environment. The intersystem model tends to define such an environment. One can conceive of the social demand and the economic and political systems of the intersystem model as being the environment of the educational system. Therefore, the intersystem model develops a typology of system-environment transactions based on an input-output exchange, the outputs of one system being the necessary input of another system. Even though the intersystem model was developed for the study of factors influencing the economic determiners of the educational system, it nevertheless facilitates the understanding of the relation between education and its environment.

Perrow (1961) has identified two major categories of goals; official and operative goals. For Perrow, official goals are the general purposes of the organization as put forth in the charter, annual reports, and in public statements.

> Official goals are purposely vague and general and do not indicate two major factors which influence organizational behavior: the host of decisions that must be made among alternative ways of achieving official goals and the priority of multiple goals, and the many unofficial goals pursued by groups within the organization.

On the other hand the operative goals

> ... designate the ends sought through the actual operating policies of the organization; they tell us what the organization actually is trying to do, regardless of what the official goals say are the aims. (Perrow, 1961).

This categorization of goals indicates three determiners of the goal development process; the development of official and operative goals, their congruence, and their legitimation and vulnerability.

It is possible to hypothesize that the official goals are directly related to the political system in terms of the intersystem model. The educational system, even as a system in itself and not as a subsystem of the political system, is marked with global official goals that are related to the political process of the society. Being part of the maintenance process of a community, education's general official goals are legitimized and integrated in the maintenance or control-oriented subsystem of society - the political system. The control aspect of the political system is also applied to the cultural evolution of the society. There is a direct relationship between the political cultural maintenance and education. As part of the maintenance function, the political system sets the values to be found in the educational system on the basis of official goals. Operative goals may be less related to the political system. Educational technology as a source of information on the educational process may be the basis for operative goals. Nevertheless, operative goals are connected to the other systems in terms of their political and economic impact. Therefore, educational goals tend to be officially derived from political processes and operationally set by the educational system in accordance with political and economic imperatives.

The question of congruence of goals between official and operative goals can be seen in terms of relation between ideologies and behaviors. If the official goals are formulated most often in a way that indicates ideological trends, there might be incongruence with these ideologies at the operative goal level. If a Minister of Education declares as an educational system official goal, the equality of opportunity for learning experiences for all children, any segregative or socially discriminating educational practices could be incongruent with official goals. Segregation practices can reflect operative goals. Operative goals should be related to official goals in order to achieve congruence in the system. Official goals ought to be ideologically oriented and operative goals related to action. One cannot criticize operative goals on other bases than their technological value, and their congruence to official goals. This last point also illustrates a different legitimation process depending on the type of goals. Official goals, being more general and ideologically oriented, are not easily legitimized. Their relation with the political order does not facilitate their change in the short term. In this sense they are less vulnerable. Attacking the official goals of education is to attack the political system and the cultural values of a society. On the contrary, the operative goals can be easily criticized and with less consequences. Changes, in the short term, can be made in operative goals. They also tend to be less directly related to other systems. Educational operative goals can be set in the educational system and not affect directly the social demand or the economic or political system. The consequences of a change of operative goals is not as important as a change in official goals since their effects are more centralized in the educational system. Their vulnerability is higher since they are easier to criticize, being more practical and clearly determined than official goals. Also they can be criticized by a wide variety of persons, even at a local or individual confrontation level, as in parent-teacher relations. On the other hand official goals are criticized effectively, that is subjected to pressure for change, only by powerful groups or organized actions.

The nature of goals

From the discussion of official and operative goals, it is possible to identify some types of goals for special education. Official goals for the educational system are ideologies affecting the entire system; therefore, there ought to be a similarity of official goals for special and regular education. Nevertheless, there are official goals that tend to influence the nature of special education differently than regular education. The analysis developed in the second chapter of this report is an example of ideological determiners as factors determining the nature of special education practices. Official goals that are related to the prevention ideology will defer from an ideology that would lead to segregative practices. Official educational goals that would tend to be of a prevention type ideology would account for factors such as the following:

1. The equality of opportunity for learning experiences for all children.

2. The focus on the self-realization of the person rather than on the acquisition of knowledge.

3. The openness of school to community.

4. The cooperative and community nature of learning and self-realization.

5. The interaction of all social services to the person - education, health, welfare, labor, and justice services.

At the operative goals level, the congruence with such official goals will generate an integrated special education delivery system within the educational system. Operative goals will tend to be formulated in order to:

1. Open all differentiated learning experiences (including the ones previously known as special), to all children even if no categorization or labeling exists within the educational system. Education will be a free public service.

2. The educational task will be centered on the process of self-realization and programs will be based on this pattern. The academic or subject matter will be used as a vehicle for this process. Therefore the focus will shift from acquisition of academic knowledge of capacities. Criteria of efficacy will be changed.

3. The educational system will be based on the participation of the parents. The school will be more oriented toward community needs. Control will be decentralized to a local level.

4. Teachers, parents, principals, and children will all be involved in the self-realization process as a community of learners.

5. The school will be opened to all for education. A diversified "permanent" education system will be established.

6. The educational, health, welfare, labor, justice, and leisure public services will be involved in comprehensive planning at a local level.

This list of factors to be considered in the development of operative goals congruent with preventive ideology type of official goals is not exhaustive. Nevertheless, it shows the extent of a comprehensive effort to establish a totally integrated plan for the participation of a person in the process of self-realization.

To conclude this analysis of the nature of goals, it is important to review the importance of congruence. Even if official goals are not changed, the operative goals can be changed to some extent, in order to shift to preventive ideology, for example, to a socio-psychological approach to special education. In other words, operative goals can be incongruent with official goals and not highly constrained to adapt to official goals. This leaves to the educational system the possibility of changing its focus. The socio-psychological approach, or the change needed to implement the integration of special education, can be started without affecting directly the political system or the culture goal setting of society.

The nature of special education

The definition of exceptionality that was derived from the discussion of open-system man and of his needs, emphasized the developmental aspect of man. Education is a growth process and special education does not differ from it. This developmental process is positive and has no place for focusing on exceptionalities as disfunctions. Education should emphasize the development of the person, or as Reynolds and Balow (1971) indicated:

> The educator prevents reading failure not by building antibodies but by teaching reading or its prerequisites with greater resourcefulness and better to more children. To be educationally relevant and to engage the teacher, the treatment must involve development, which is to say that the criterion is positive. (Reynolds and Balow, 1971, p. 359).

The nature of special education presented here is derived from the Reynolds and Balow (1971) "instructional system" model as discussed in Chapter II. They defined the term "instructional system" in reference to "integrated sets of procedures, curricula, and materials that may be used to achieve certain major learning goals with children". They identify several already known instructional systems like several systems that can be used to teach reading (some being oral-phonetic others monoral, some using modified orthography as introductory teaching, etc.). The same can be true for mathematics, for social studies, for the arts, etc... Presumably, the school should offer all systems that might be needed by any pupil. For Reynolds and Balow, the field of special education may be defined in terms of its responsibility to help, develop and install highly differentiated school programs (many instructional systems) and to see that the related plans and decisions about children are made effectively.

The particular systems, for which special education carries primary responsibility, include many in the categories of language learning, cognitive development, psychomotor training, socialization, and affective learning. It should be noted that the concept of instructional system does not use child category language. Rather the emphasis is on specifying competency domains and specific instructional goals.

In order to follow Reynolds's and Balow's logic, attention is directed to the following quotation from their discussion of the relation between special and regular education. This analysis is the center of the instructional system concept as integration oriented practices.

> To the maximum extent possible, of course, special educators seek to develop the attitudes and skills necessary to accommodate pupil usual needs within the regular framework. When it is not possible to achieve the necessary climate and individualization of instruction in regular classrooms taught by regular teachers, then the special educator sees himself as a resource for his entire school and not simply as one who takes his own little group to some isolated room. (Reynolds and Balow, 1971, p. 361).

At this stage, the authors tend to view the child's needs as unusual which seems to be a different conception of needs than the one developed in this study. There are no such things as unusual ways; that is a very different perspective. Instructional system should not be based on unusual needs but on the satisfaction of basic needs even if the child has developed unusual ways of satisfying such needs. For special educators to become a resource for the entire school implies a well-articulated set of expectations and a belief sharing process as identified in Beery's (1974) Catalyst model. Educators should all have an openness to the entire school as members of a community of learners. These remarks do not tend to criticize the Reynolds and Balow model but to specify more in detail the basic elements to be added to their view.

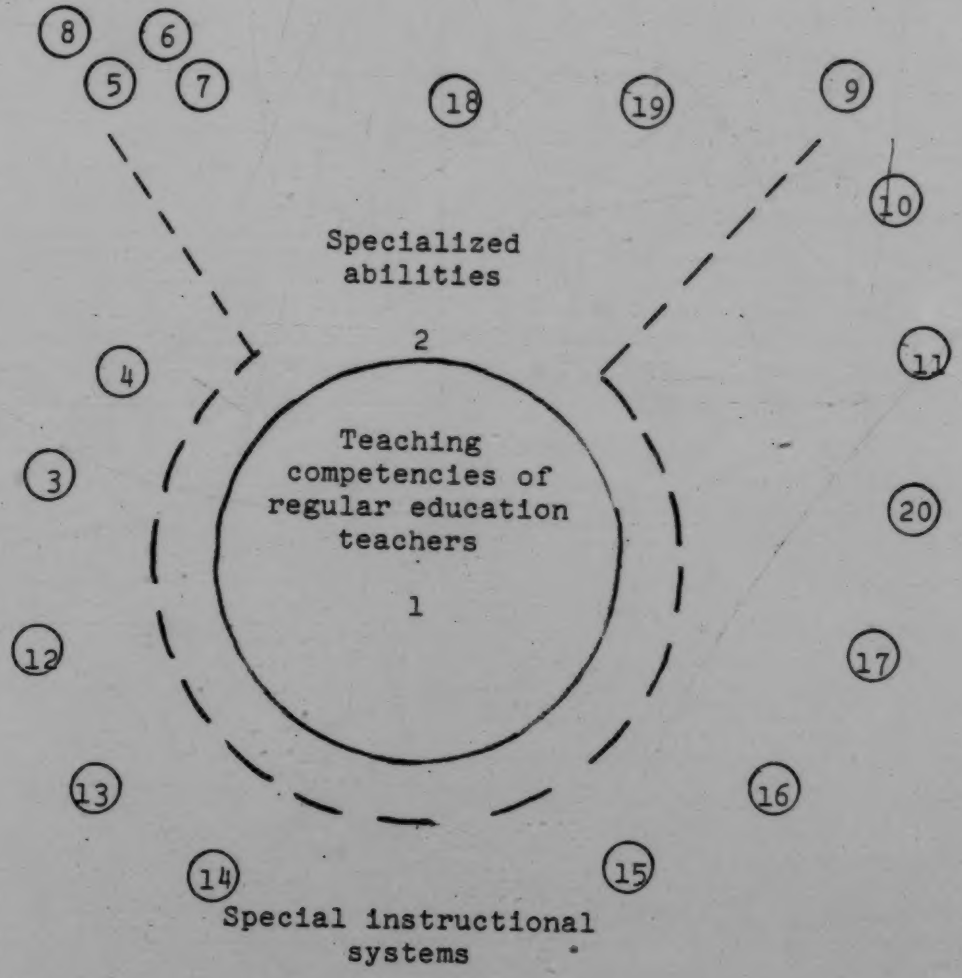
Reynolds and Balow also add that,

> ... in this framework, (Instructional system), one can think of special education as an aggregate term covering all specialized forms of instruction that ordinarily cannot be offered by unassisted regular classroom teachers. (Reynolds and Balow, 1971, p. 361).

The relation of special and regular education is schematically represented in Figure 14. The relatively large circle (1) symbolizes the teaching competencies possessed by regular classroom teachers. Competencies vary, of course, but the symbol is useful because regular teachers fall into a kind of modal pattern with respect to the range of their teaching resourcefulness. The dotted portion (2) of the figure tends to enlarge the first circle (1) and represents the efforts that should be made to extend the specialized abilities and sensitivities of regular teachers. The dotted configuration is left open to indicate continuing consultation with and assistance by specialists. All of the remaining small circles (3, 4, 5 ...N) are intended to represent special instructional systems that most often are offered by specially training personnel. These instructional systems tend to fall into certain clusters, suggesting that several of them are likely to be learned and vended by one person. The specialized systems or aspects of the school program can and perhaps often should carry labels reflecting their characteristics.

Figure 14

The Relation of Special Instructional System to Regular Education (Reynolds and Balow, 1972)


8
6
5
7
18
19
9
10
Specialized abilities
2
11
4
3
Teaching competencies of regular education teachers
1
20
12
17
13
16
14
15
Special instructional systems

Teachers might also carry the label in some cases as, for example, the "orientation and mobility instructor" or the "preschool language teacher".

Another key consideration according to the authors in conceptualizing special education as the aggregate of highly specialized instructional systems is the problem of allocating specific children to the various systems.

> In essence, the placement decision involves maximizing the "pay-off" for individuals within an institution in which several alternative treatments are available (assuming that all individuals are to be returned, or that no decision for rejection is made). The traditional predictive model of the school is not useful in making the placement or allocation decision and neither is simple categorization by handicaps; rather educators must learn to interpret variables that produce interaction effects with instructional systems. In other words, children should be placed in special programs on the basis of demonstrated aptitude by treatment interactions (ATI). (Reynolds and Balow, 1971, p. 362).

For the authors the logic of their approach is quite different from now commonly used procedures which tend to depend upon certain broadband variables such as I.Q. or decibel loss in the speech range to make placement decisions.

> Variables that produce similar slants or regression lines for all approaches do not help to choose between approaches. When we have learned to specify the variables that should be used in allocating children to special programs we will, of course, have something quite unlike the present simple systems of categories of exceptional children. (Reynolds and Balow, 1971, p. 363).

Again it is necessary to add more data to the instructional model in order to assume possible organization of an A.T.I. placement process. There are several conditions or facilitators of such a process to be implemented in the school system.

At the first level, a non-graded school format should be emphasized, and therefore individualization of education as a prerequisite to the ATI (aptitude by treatment interaction) process. The only way to specify the aptitude level by treatment interaction is to be well equipped with individual data. An educational process based on the individual, like the non-graded school model as analysed by Murray and Wilhour (1971), proposes a flexible structure for meeting the varied needs and conditions of the individual. The non-graded approach according to these authors is built upon the following assumptions:

1. All children should progress at their own personal rate of growth.

2. Curriculum experiences should be differentiated to meet the needs of children.

3. Utilization of teacher talents should be developed so that children should have more challenging experiences.

4. More instructional time could be given to each child when the children are grouped in the skill subjects having a narrower range of reading and mathematics abilities.

5. Differentiation of materials for meeting the interest and achievement levels of children should motivate the learner to want to learn.

6. Flexible grouping arrangements of children should allow for large group, small group, and individual instruction.

7. The involvement of administrators, teachers, parents, and children in the planning and implementation should bring about better understanding of all concerned.

8. Evaluation appropriate to the ability of the individual child should cause better social adjustment, thus better behavior.

9. Flexible buildings and equipment should make it easier to personalize instruction.

10. Grouping and regrouping of children should provide opportunities for children to work and play together, thus learning to live together.

11. A team approach to the utilization of staff should allow for effective planning time and cooperative diagnosis of children by staff.

All these assumptions are compatible with the instructional model. Therefore developing a non-graded school approach could facilitate the integration of special education as "instructional system" into the educational system. In principle the instructional system and the "A.T.I." process appear to be very powerful tools of integration, although the treatments that are to be known as the fundamental approaches to the teacher-pupil developmental process, are not very well identified. An effort should be made to identify specifically what are these treatments, to develop "instructional systems" by determining specialized treatment and their possible interaction. According to the "open-system man" approach and the self-realization goal of education, this research should be based on two dimensions of treatment: first, it should be based on the notion of prerequisites in terms of the capacities-information approach to need satisfaction discussed in the first part of this chapter. The first level of treatment and "instructional system" identification should focus on patterns of need satisfaction and be based on the four dimensions of the open-system concept of man. The specificity of these dimensions in terms of physical, psychological, social and cultural needs should permit the realization of a curriculum emphasizing the acquisition of self-realization behaviors by the child. Treatments then should be based on development capacities and on information

(1974) Catalyst process by the establishment of a pattern of information sharing. In such a model of special education the child will tend to be part of an entire school, not only a specific group and teachers will also open their action to the school level. The second consequence of this model is to shift the controversy of integrated versus segregated classroom treatment to another conceptual level. Actual discussion about integration, as the placement of exceptional children in regular classrooms, will lose its significance. Provisions for individualized needs, for universal "instructional systems" for differentiated patterns of grouping will result in a natural participation pattern for all children, thus changing completely the nature of the actual controversy about integration. Integration will be first articulated at the entire educational system level affecting everyone. Therefore "instructional system" as a mode of self-realization will not only be used for exceptional children but for all children.

Special education as a set of integrated instructional systems is, therefore, specifically oriented toward the elaboration of facilitators of self-realization. Educational efforts should be committed to research in order to develop well defined "instructional systems", treatment interactions, and diagnosis on the basis of the "Aptitude by Treatment

Interactions" approach. This should lead to specialized and adapted action or learning experiences in specific "instructional systems". Finally, actual special education components should be charged with the task of constantly monitoring the educational system to discover how appropriately the specific "instructional system" and advocated practices serve each child. Therefore, special education finds its nature and place in the global educational system rather than at the specialized treatment of exceptional children level as developed graphically in Figure 14.

A place for everyone

After specifying the nature of special education, it is possible to establish in more detail the roles of the human components of the educational system in terms of the instructional system model and also in accordance with the philosophical premises developed in this chapter. What are the implications of the previous discussions about the roles and participation of the components in the self-realization process? Without being exhaustive this analysis can provide the guidelines for the establishment of a set of interactions within the educational system.

The child. According to the open-system view of man, the child is involved in a developmental process that keeps him growing in terms of the four dimensions or qualities of man. The child is developing goals, acquiring means for achieving these goals, developing a sense of reality and attempting to respond to normative aspects of society. This process is activated and enlarged by the development of capacities and by the gathering of information of an environmental nature. Development has been active since birth; therefore, when the child reaches school age he has already been involved in the developmental processes and has expanded his environment from self to the community level. However, the maturation process is underway and therefore school serves as another developing agent. When the child enters school he is confronted for the first time by developmental agents (educators) who are socially responsible for his development, since education is an organized public service. The schooling process should then be for the child an involvement in a sequential pattern of growth. Growth implies adjustment, learning, development, and should be based on actualization of capacities, information acquisition, and adjustment in the need interaction pattern. When the child comes to school he becomes a member of a collectivity that is oriented toward developing the self-realization of its members. As such the child should be first perceived as a member of a group and not merely as an individual student. Secondly, he should be perceived as a learner, just like all other members, but with individualized conditions of learning. In this sense there is no place for special membership like special education but universal membership. There are no such things as special provisions for special children; there are only provisions adapted for each child in a universal individualized set of provisions. All exceptional children that actually are the responsibility of the public educational system would fall within such a model of school participation. No child would need to be labeled as exceptional. Every child would have access to a specially determined instructional system.

Parents. Since the open-system model of man is not only an educational "professional" tool in the sense that it can be used by anyone in every day life, parents as other human beings could also use such a strategy. Just like children or teachers, parents are seen as having needs to satisfy, and basically they are the same needs. Much has been written about parental participation in school affairs. The question is then "to what extent the educational system has tried to activate their participation in a growth process?" Most often parents are strangers to the school social system. However, they have a very small idea of what is going on there, and finally they are asked to contribute more in terms of their child adjustment than the child's growth. In the model of education discussed in this study, parents ought not to be confronted with school in this way. Parents' participation in school should be compulsory since the first entry of their child at pre-school level. They are presented with information on the educational process and on the nature of learning activities. They are regularly informed of the learning activities. They are trained to provide continuity between home and school, and they take part in the decision making process. According to Beery's (1974) Catalyst model this practice is individualized in terms of both the parent and the child. Parents are perceived like other members of the learning systems, as being involved in a developmental process. An example from the author's experience can well illustrate this process.

In a school for mongoloid children, parents were accused of overprotecting their children and the effects of teachers practices with the students was reduced by such attitude. A plan was elaborated to study the motives of the overprotective behavior of parents. It was found that parents of mongoloid children were confronted with social pressures in terms of depreciation of their parental roles. Self-respect in these families was threatened by the presence of such a child. As a result the parents had developed a protective role that tended to be more philanthropic than developmental. Such behavior was a compromise, and an easier way to gain social approval from relatives and neighbors.

A plan was established by the school to enhance the self-perception of parents of a mongoloid child. Activities were organized to help parents to change their protective behavior into a developmental strategy. The focus of such action was to build self-respect and a need satisfaction pattern for parents in acting as development agents for the child. The plan, when implemented, was successful due to the individualization of the process; each family was helped on the basis of its specific conditions. This program was based on parent-child-teacher interaction in a collectivity oriented toward self-realization of all members of the collectivity. There are many different ways to operationalize such a process but any plans that have potential for achieving such a goal should recognize the following factors:

1. Parents are, like all other members of the educational system, individuals with needs to satisfy.

2. Parents are agents of growth for the child and as such should be part of the information network of the educational system.

3. The school should be physically and developmentally open to parents for their own needs.

4. Parents should be part of the decision-making process not only on the basis of democratic values but also on the basis of growth strategies.

5. Curriculum should take into account parental participation in the learning process.

Teachers. Teacher roles are different from children and parent roles. They are paid workers in the educational system. This adds a factor of responsibility and of need for adherence to their role definitions. Like children and parents they are members of a learning community. But as paid workers, they are urged to productivity and effectiveness. In the socio-psychological approach to education, as defined earlier, the criteria for effectiveness shift from academic achievement to the enhancement of self-realization of all involved members. This does not abolish control over productivity in the school nor the maintenance function, but does tend to decentralize them. Even more, the processes that tend to limit teachers' actions to official programs and sequence of the academic subject, will be changed to another approach. Such "programs" can be seen as depersonalizing the educational process. Most often teachers have nothing to say about the development of these "programs". On the contrary, self-realization goals and a community of learners view are highly personalized, and individualized. The participation in the "instructional system" necessitates a good knowledge of personal growth processes for teachers. Therefore, such a personalized system is hypothesized to result in greater security for teachers.

Teachers' tasks should be centered on five factors: interaction with children, working with parents, information sharing and planning at the school level, self-preparation, and on the job training. First of all, teachers are assigned as members of the instructional system and might not be the only persons to work with a specific group of children. The transmission of information at the school level is very important, and a team teaching approach should be used. All these factors call for a very specific cooperative organizational climate and commensurate attitude changes among teachers. Also, teachers should be well aware of the nature of the social environment of the school. Finally, teacher training should focus on the cooperative nature of learning and emphasize the personal growth of all members of the system.

Principal. As has been indicated there is a need for control and maintenance in the educational system even if the criteria for achievement or productivity are changed. In addition, an additional demand results from the "instructional systems" approach, namely, complex sets of learning situations to be organized and supervised. The school principal is at the center of the supervisory process. The principal ought to be the controller of the instructional system, the supervisor of the needs oriented curriculum, the principal agent in the catalyst process, an agent of attitude change and organizational growth, and, finally, he is at the middle of the relationships between the school board and the community. All of these practices are to be pursued in a decentralized way leaving room for participation by children, parents and teachers in decision-making. The principal is first a member of the community of learners, and as such his relations with faculty and students are marked with shared interest in the learning process. He is responsible for his specific school, and should be assisted with technical tasks that could take time away from the interpersonal relationship role which he should assume. Such help could be of an administrative nature leaving the principal to emphasize the task of supervision and human relationships. The efficacy of principals should be evaluated on self-realization criteria and have nothing to do directly with the academic achievement of the students of his school; this subgoal should be left as an outcome of the growth process.

Resource persons. According to the "instructional systems" model there are resource persons to be found in the schools. In fact, it is possible to identify four levels of resource personnel.

The first level - resource for children and teachers - is implied in the "instructional system" model. All teachers of the "instructional systems" are resource persons for other teachers; there must be an effective resource sharing process at the root of the "instructional system" model. At a second level, there is assistance in the school for helping the teachers with specific prerequisite learnings. These are teachers half-involved in an "instructional system" and half-involved in teacher assistance. The need for such resource persons is defined by the specific needs of teachers in specific schools. At a third level there are, at the school board level, staff members who are specialized in curriculum development. These persons have the responsibility to integrate academic subjects with a need satisfaction oriented curriculum. They should be well-equipped to work with teachers and principals in local cirriculum development. Since they are specialized agents in each discipline in the instructional system, they are resource persons for improving the methodology of teaching and curriculum development. Finally, at the fourth level, there are the community services personnel. They are not related directly to the school but to other fields of public service such as welfare, health, labor, justice, leisure and sports. A set of relationships has to be established with these persons since they can become facilitators of the growth process. The relationships with these resource personnel should not be left to chance but should be well-planned and articulated. These four types of resource persons will be very useful if not essential in the highly specialized "instructional system", in the "Aptitude Treatment Interaction" allocation process and also in both developing and arranging the various learning experiences.

This functional analysis could have been done in greater detail; however, it was intended to leave this discussion at the school level and not to try to be exhaustive. The various aspects presented in this analysis are detailed to the extent that they give a good overview of an integrated educational process.

OTHER ELEMENTS OF THE EDUCATIONAL PROCESS

In this final part of Chapter IV, discussion focuses on three major functions that can affect the process of education. Several conditions ought to be met at these functional levels in order to institute the approach defined in this chapter. These functions are curriculum development, budgeting and control.

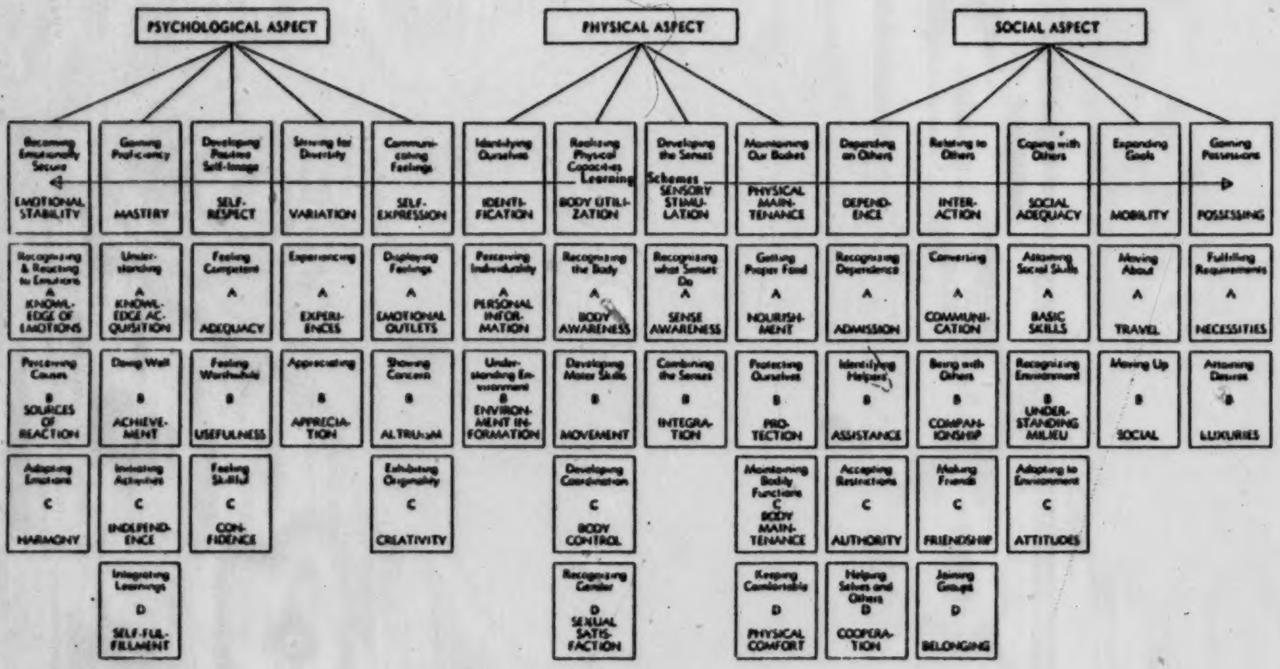
Curriculum development

In previous sections of this chapter the importance of a need-oriented curriculum has been presented. The actual state of curriculum development in North American education is centered on sequence types of acquisition of knowledge by the child. Even if this perspective did emphasize children's physical, psychological and social realities, the aim has not been self-realization but acquisition of knowledge as an end product. A need oriented curriculum is seen to be very different from that perspective. The final output of this curriculum as an educational strategy, is the self-realization of the person. Curriculum development under this goal emphasizes the process and cannot predict a universal type of self-realized outputs. It is not the purpose of this thesis to elaborate an operational version of a curriculum. The interest here is in the development process of a need-oriented cirriculum that will emphasize self-realization rather than academic achievement as a primary goal. The discussion that follows is only indicative of the type of premises or framework that should be used in curriculum development.

Goldstein (1969), in following his identification of needs, has developed a social learning curriculum for educable mentally retarded children. This curriculum was based on a model of fourteen needs and the four levels of the expanding environment. Figure 15 represents the elements of curriculum under the fourteen needs at the level of self. Each of the fourteen needs is identified in terms of competencies to acquire, and presented in partial capacities development. For example; the need for emotional stability or becoming emotionally secure as a competence, is divided into

Figure 15

Goldstein (1969) Social Learning Curriculum


PSYCHOLOGICAL ASPECT
PHYSICAL ASPECT
SOCIAL ASPECT
Learning Schemes
Becoming Emotionally Secure EMOTIONAL STABILITY
Recognizing & Reacting to Emotions A KNOWLEDGE OF EMOTIONS
Perceiving Causes B SOURCES OF REACTION
Adapting Emotions C HARMONY
Gaining Proficiency MASTERY
Understanding A KNOWLEDGE ACQUISITION
Doing Well B ACHIEVEMENT
Initiating Activities C INDEPENDENCE
Integrating Learnings D SELF-FULFILLMENT
Developing Positive Self-Image SELF-RESPECT
Feeling Competent A ADEQUACY
Feeling Worthwhile B USEFULNESS
Feeling Skillful C CONFIDENCE
Striving for Diversity VARIATION
Experiencing A EXPERIENCES
Appreciating B APPRECIATION
Communicating Feelings SELF-EXPRESSION
Displaying Feelings A EMOTIONAL OUTLETS
Showing Concern B ALTRUISM
Exhibiting Originality C CREATIVITY
Identifying Ourselves IDENTIFICATION
Perceiving Individuality A PERSONAL INFORMATION
Understanding Environment B ENVIRONMENT INFORMATION
Realizing Physical Capacities BODY UTILIZATION
Recognizing the Body A BODY AWARENESS
Developing Motor Skills B MOVEMENT
Developing Coordination C BODY CONTROL
Recognizing Gender D SEXUAL SATISFACTION
Developing the Senses SENSORY STIMULATION
Recognizing what Senses Do A SENSE AWARENESS
Combining the Senses B INTEGRATION
Maintaining Our Bodies PHYSICAL MAINTENANCE
Getting Proper Food A NOURISHMENT
Protecting Ourselves B PROTECTION
Maintaining Bodily Functions C BODY MAINTENANCE
Keeping Comfortable D PHYSICAL COMFORT
Depending on Others DEPENDENCE
Recognizing Dependence A ADMISSION
Identifying Helpers B ASSISTANCE
Accepting Restrictions C AUTHORITY
Helping Selves and Others D COOPERATION
Relating to Others INTERACTION
Conversing A COMMUNICATION
Being with Others B COMPANIONSHIP
Making Friends C FRIENDSHIP
Joining Groups D BELONGING
Coping with Others SOCIAL ADEQUACY
Attaining Social Skills A BASIC SKILLS
Recognizing Environment B UNDERSTANDING MILIEU
Adapting to Environment C ATTITUDES
Expanding Goals MOBILITY
Moving About A TRAVEL
Moving Up B SOCIAL
Gaining Possessions POSSESSING
Fulfilling Requirements A NECESSITIES
Attaining Desires B LUXURIES

three levels of capacities development:

Knowledge of emotions - competence - Recognizing and reacting to emotions

Sources of reactions - competence - Perceiving causes

Harmony - competence - Adapting emotions.

Since the aim of education is centered on the self-realization process, curriculum should emphasize the prevention of internal and external marginality. Therefore, two fundamental premises ought to prevail in curriculum development: (1) curriculum should be developed on the "needs" model and (2) should focus on the development of the four dimensions of the "open-system man" model by involvement in capacities development and transmission of information. Goldstein's curriculum seems to be specifically oriented toward such actions; his work was further developed by Heiss and Mischio (1971). These authors have gone further in processing Goldstein's curriculum to show the integration of academic learning in a need-oriented approach. Figure 16 which is derived from the Heiss and Mischio study, is a three dimensional model, incorporating the four levels of expanding environment (social behavior contexts) with curricular activities areas (social learning, communication arts, quantitative thinking, other) and psycho-educational processes (conceptualization, language, imagery, perception). In this figure there is a cell selected for further analysis. This cell is schematically represented in Figure 17. In this cell the three dimensions of Figure 16

Figure 16

Model of Total Curriculum
(Heiss and Mischio, 1971)

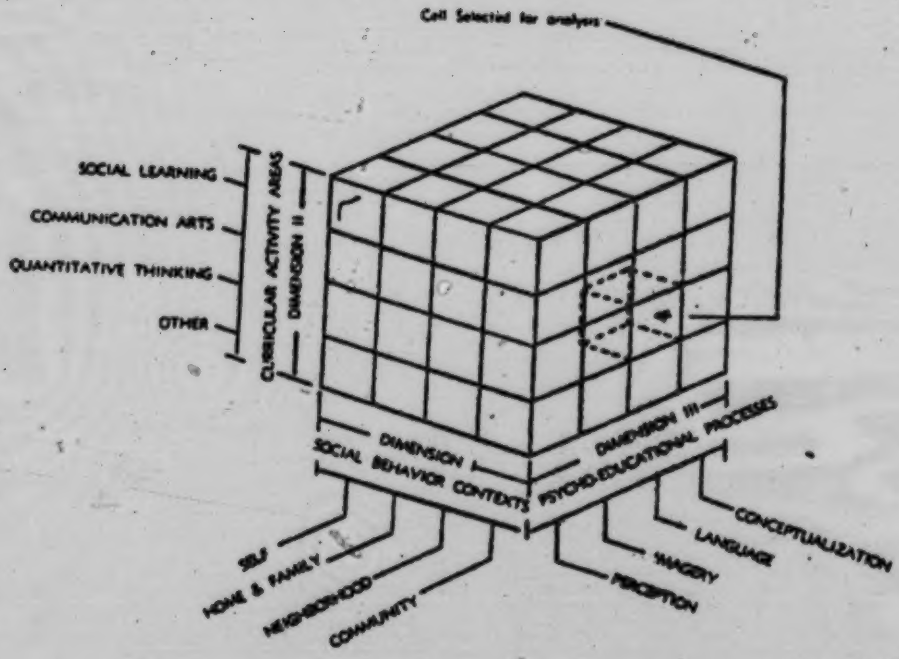
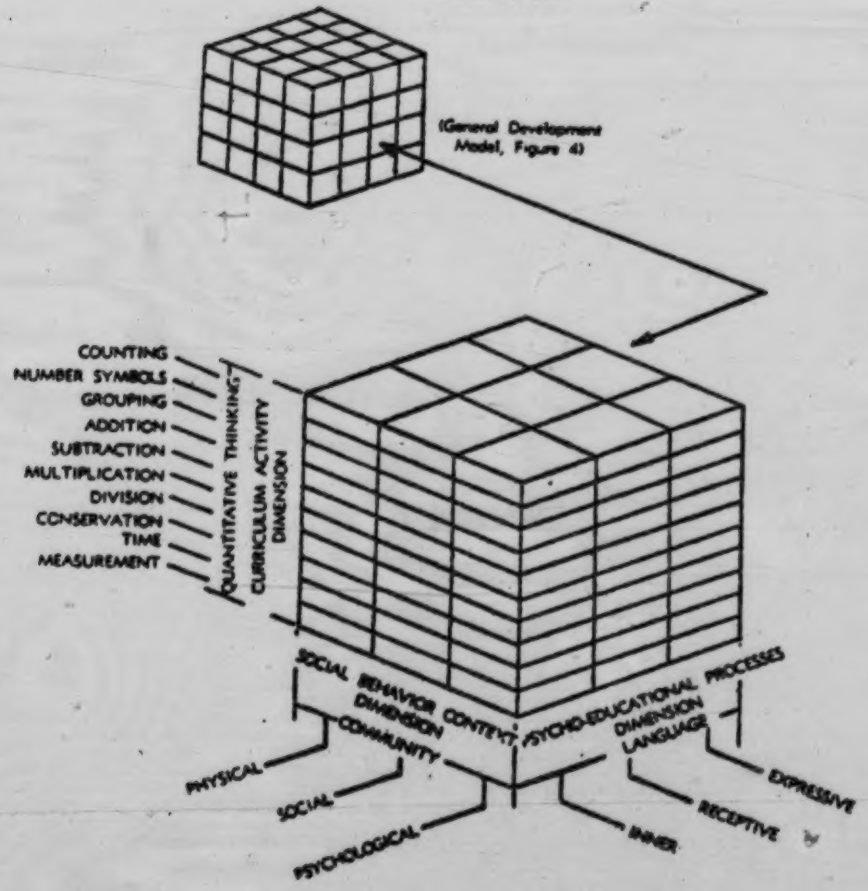

Cell Selected for analysis
SOCIAL LEARNING
COMMUNICATION ARTS
QUANTITATIVE THINKING
OTHER
CURRICULAR ACTIVITY AREAS
DIMENSION II
DIMENSION I
SOCIAL BEHAVIOR CONTEXTS
DIMENSION III
PSYCHO-EDUCATIONAL PROCESSES
SELF
HOME & FAMILY
NEIGHBORHOOD
COMMUNITY
PERCEPTION
IMAGERY
LANGUAGE
CONCEPTUALIZATION

Figure 17

Schematic Relationship of the Component
of a Total Educational Program
(Heiss and Mischio, 1971)


(General Development Model, Figure 4)
COUNTING
NUMBER SYMBOLS
GROUPING
ADDITION
SUBTRACTION
MULTIPLICATION
DIVISION
CONSERVATION
TIME
MEASUREMENT
QUANTITATIVE THINKING
CURRICULUM ACTIVITY DIMENSION
SOCIAL BEHAVIOR CONTEXT DIMENSION
COMMUNITY
PHYSICAL
SOCIAL
PSYCHOLOGICAL
PSYCHO-EDUCATIONAL PROCESSES DIMENSION
LANGUAGE
EXPRESSIVE
RECEPTIVE
INNER

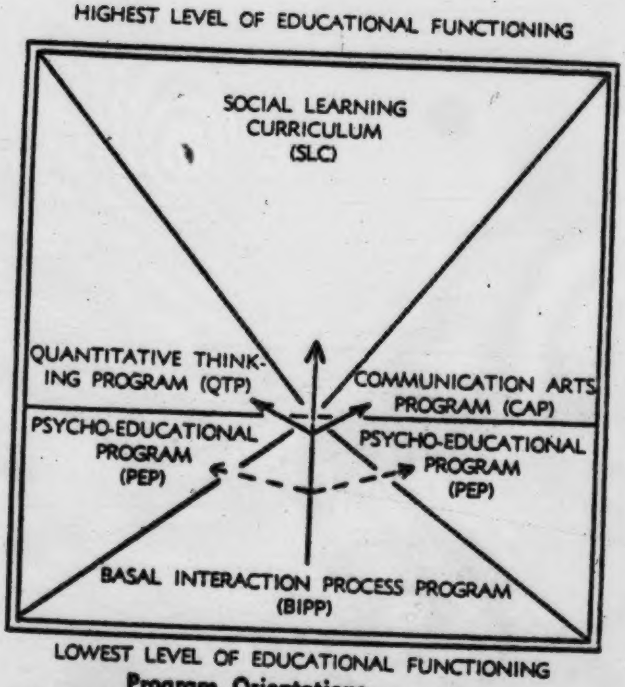
are divided into more specific elements. The social behavior context is specified in terms of needs aspects (Goldstein's model) at the community level. The curriculum activity dimension is specified at the quantitative thinking level as a set of concepts, rules and skills. Finally the psycho-educational processes in language are specified in terms of inner, receptive and expressive processes. As indicated by Heiss and Mischio, the model is one of curriculum development, not a curriculum in itself. Finally, the authors have developed a graphical representation of the relationship of the components of a total educational program based on such a model. Figure 18 shows this relationship and the authors explain it as follows:

> From a behavioral reductionist view, the best concepts are taught at the SLC (social learning curriculum) level, more specific concepts and skills developed through the QTP (Quantitative thinking program) and the basic readiness skills and processes are presented at the BIPP (Basal interaction process program) stage. If complex processing difficulties emerge during the skills programs, the teacher can shift over to the PEP (Psycho-educational program) for remediation of the disabilities. (Heiss and Mischio, 1971, p. 9).

It is possible to infer a high level of compatibility between the instructional systems model and this type of relationship among program elements. The BIPP and PEP stage are actually articulated in special classrooms. They would be seen as instructional systems in the perspective of this study

Figure 18

Illustration Cell from General
Curriculum Development Model
(Heiss and Mischio, 1971)


HIGHEST LEVEL OF EDUCATIONAL FUNCTIONING
SOCIAL LEARNING CURRICULUM (SLC)
QUANTITATIVE THINKING PROGRAM (QTP)
COMMUNICATION ARTS PROGRAM (CAP)
PSYCHO-EDUCATIONAL PROGRAM (PEP)
PSYCHO-EDUCATIONAL PROGRAM (PEP)
BASAL INTERACTION PROCESS PROGRAM (BIPP)
LOWEST LEVEL OF EDUCATIONAL FUNCTIONING

Program Orientations

SLC — Social concepts and behaviors
QTP — Mathematical concepts, rules and skills
CAP — Language concepts, rules and skills
PEP — Specific learning processes
BIPP — Movement and general processes

as well as SLC, QTP and CAP. The work of Goldstein (1969) and Heiss and Mischio (1971) was more specifically oriented toward the education of educable mentally retarded students; however, their contribution can be seen as being capable of expansion to an entire educational program for all children. The change in focus would be strictly in terms of the curriculum development. At this stage, research should be encouraged on the use of this curriculum development model in order to reorganize the educational program, integrating the premises developed in this study.

Control

An educational system that would be highly related to the cooperative and collective nature of learning and which would focus on the school as a social habitat and growth milieu, should emphasize decentralization of control. At the higher level, the state level, decentralization implies greater autonomy of the local or regional educational structures. Norms for control should be locally determined; the state agencies would act as facilitators and bring professional assistance to such a process. The same pattern should be applied locally. The nature of education as developed in this study necessitates changes in attitudes, and the definition of what is valued in the educational system. Furthermore it calls for changes at the basic level of action. Therefore more opportunities for control should be given to the basic components of the system: children, parents, teachers, and principals. This decentralization does not imply the abolition of any hierarchy in the system. Levels of responsibility need to be identified, but the nature of the relationship and the norms to be implemented should emphasize shared values as determined by the field agents at the school level. Again, this is not an exhaustive analysis of the control function in the educational system but only examines premises corresponding to the nature of the framework of this study.

Budgeting

One can think of instructional systems as specific programs which are locally-determined according to specific needs. In some way, this perception suggests a budgeting process which is dependent on local realities. Therefore, decentralization should also be applied in the budgeting process. Local program budgeting should be emphasized in preference to state-determined norms of financing or subsidizing. Funding education by the state is a form of tax allocation and should not be left solely to the support of resources available to local educational governments. Planning-Programming-Budgeting Systems can be articulated at local levels as the mode of determining local financial needs. This type of planning appears to be more congruent with the "instructional system" and decentralized approach. Nevertheless, assistance should be given to local agencies to help their planning and financing activities under such an approach. It appears that local planning and programming for financial support is consistent with the effort of developing local strength and originality, and therefore local adaptation, of the school to the needs of its components. Another important feature of the P.P.B.S. as applied to the "instructional system" model, is the possibility to establish a non-categorical (in terms of exceptionalities) budgeting and financing process. "Instructional systems" are not categorical and budgeting by "Instructional system" follows the functional integration pattern.

SUMMARY

This chapter constitutes an attempt to integrate several concepts and models into a systemic conceptual model of special education. The model being conceptual does not pretend to give operationalized propositions but is rather devoted to a certain conceptual order under a specific ideological premise. Such a model is congruent with the socio-psychological approach to special education facilitating the integration of special education into the educational system. It is also congruent with the prevention ideology as being an attempt to avoid any social segregation pattern, generators of exceptionality, and also by being more responsive to individual needs. The conceptual model developed in this chapter is not to be transformed in the limit of this study into an operational model. Nevertheless the next chapter will focus on a model for planning in an effort to determine a mode of implementation of the model. It is possible to think of a conceptual model as the canvas for the elaboration of an operational model. The next chapter will be oriented toward the development of an educational planning strategy that could facilitate the transition from the conceptual model to operational propositions.

Chapter V

THE MODEL: ITS IMPLEMENTATION BY A PLANNING STRATEGY

What has been described in the preceding chapter is a set of tactics or conditions which ought to be actualized in an educational system in order to achieve the integration of special education. This analysis was presented as the conceptual framework of an integrated special education delivery system. As such, it can be seen as the set of elements constituting a "model of special education".

This chapter will be oriented toward the identification of possible use of a planning model for the implementation of the conceptual model of special education. It is not enough for action purposes to establish conceptual integration into a model; there is also a need for strategies of implementation. This need can be seen as the necessity to articulate the model of special education into an effective and sequential process of change. Since the conceptual framework, as developed in the previous chapter, is derived from an effort to integrate several concepts of diversified origins, a planning model ought to facilitate the implementation of such conceptual elements. Therefore, the planning model to be used should be evaluated on the basis of its potential for organizing the conceptual model of special education into an integrated set of conditions to be met in the educational delivery system.

This chapter will be divided into two discussions: the first, on the need of a general planning model at the global educational system level, the other, on the specificity of the partial process of special education planning as related to the general model.

THE GENERAL MODEL

Since integration was defined in this report as having a universal nature rather than a strict special education implication, integration of special education ought to lead to a common or universal (special and regular education) planning process. As has been discussed, special education ought to be found at every functional level of the system rather than being a structurally separated element in the system. Every planning effort in the system, should relate to special education as part of the educational function rather than as a separate or special unit or structural component with its own planning criteria. One factor in the discussion on the philosophical perspectives in the previous chapters that can be identified is the need for a long range implementation process. The changes in the educational system, called for by such a definition of special education, cannot be accomplished in short time periods but must be on a programmed long term basis. A planning model, based on such changes, should provide for long range planning and evaluation. Also, such a model ought to be comprehensive enough to include all identified elements or areas of changes, integrating all possible components discussed in previous chapters of this thesis. Another important feature of the model for planning lies in its systematization of the implementation process as discussed earlier. Systematization and coordination should prevail in the complex integration of diversified elements as prescribed by the nature of the model of special education. Finally, two other factors should be considered for such a model, namely, the decentralization of the planning task and the intersystem nature of planning. Decentralization of the planning task refers to effective intrasystem relationships to assure the copenetration of the planning and the operational components of the system. The intersystem nature of planning on the other hand refers to the possible coordination of individual components related to education while maintaining their autonomy.

In summary, the planning model that should be used in the education system should:

1. provide for long range planning;
2. be highly comprehensive;
3. be systematic in implementation;
4. consider the effective intrasystem relationship favoring the decentralization of planning; and,
5. achieve intersystem coordination.

Perhaps another characteristic which could be added to the list is the use of a system conceptual framework in order to facilitate the conceptual integration of the planning model and the model of special education developed in this study. Bell, Hagans, Harper and Seger (1971) have developed a planning model that precisely corresponds to such characteristics. Their model is based on three components of planning (Figure 19). They also identify a planning cycle with elements corresponding to the specific components (Figure 20). The model is presented in Figure 21.

The three components of planning are described by the authors. *Strategy* is concerned with identification of problems, definition of policy objectives and assignment of institutional roles and resources. The *tactics* then translate the policy objectives and general allocation of resources into specific designs for action; while *control* is a management responsibility and assures that performance proceeds according to plans. The discharge of this responsibility provides for execution and revision of plans.

For these authors, the functions of a planning cycle presented in Figure 20 are organized into a model with five activity clusters which are diagrammed in Figure 21. There is provision for overall interaction, or system recycling, between activity clusters, and constant communication through the use of the information system is particularly important and allows the model to be entered at any point. These qualities provide maximum flexibility, consistency, constant evaluation and checking for accuracy. Ultimately, such a system avoids waste and confusion by making explicit the operational processes as well as the expectations and values on which they are based. This characteristic of the model follows the logic of ideological awareness defined in Chapter III of this study. Ideological awareness refers to the knowledge of values and expectations

Figure 19

Planning Design
(Bell, Hagans, Harper and Seger, 1971)

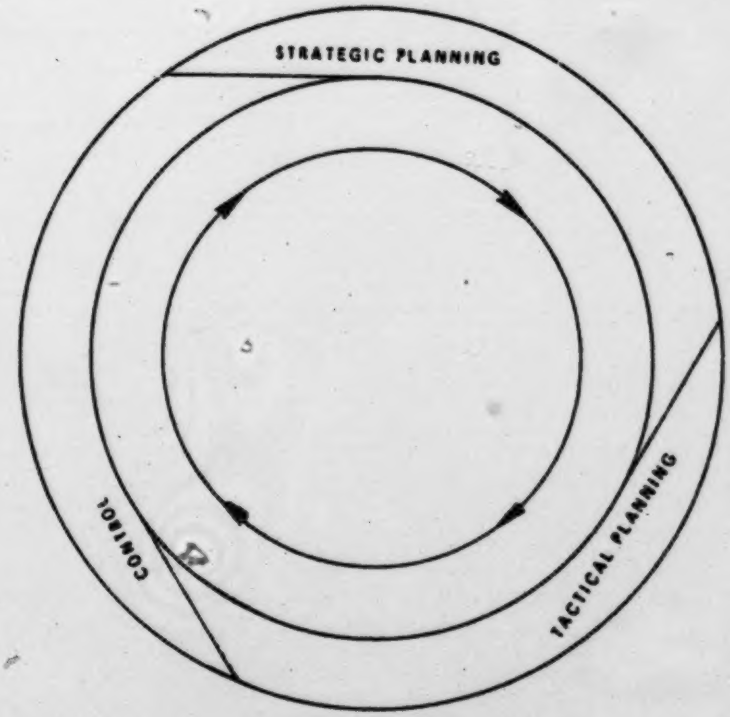

STRATEGIC PLANNING
TACTICAL PLANNING
CONTROL

Figure 20

The Planning Cycle
(Bell, Hagans, Harper and Seger, 1971)

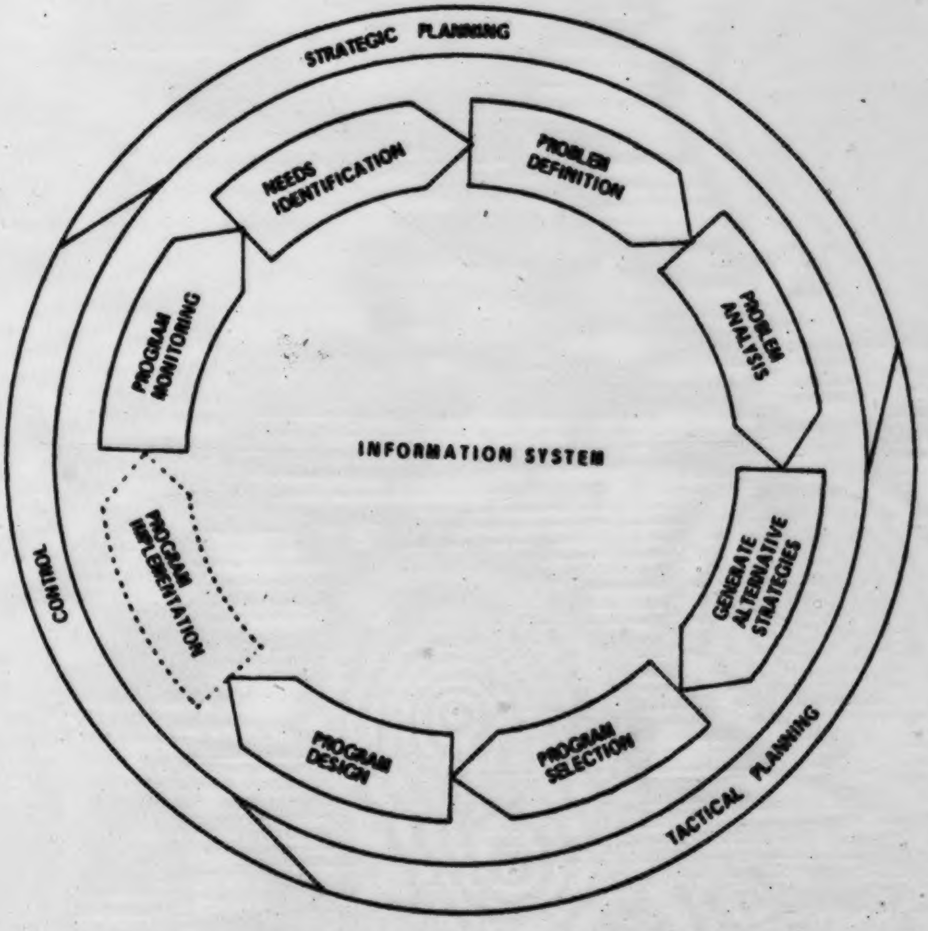
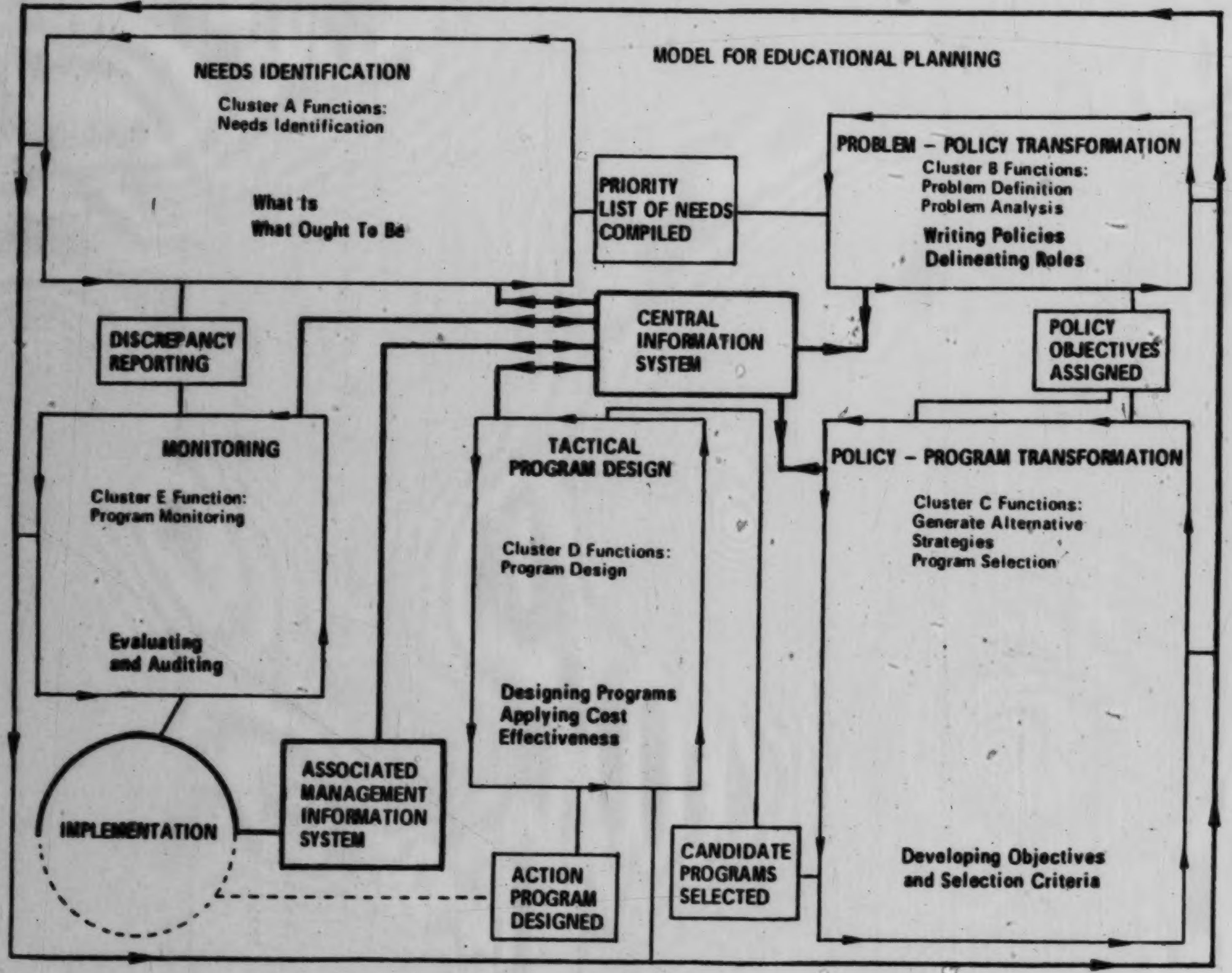

STRATEGIC PLANNING
NEEDS IDENTIFICATION
PROBLEM DEFINITION
PROBLEM ANALYSIS
GENERATE ALTERNATIVE STRATEGIES
PROGRAM SELECTION
PROGRAM DESIGN
PROGRAM IMPLEMENTATION
PROGRAM MONITORING
INFORMATION SYSTEM
CONTROL
TACTICAL PLANNING

Figure 21

Conceptual Presentation of Model (Bell, Hagans, Harper and Seger, 1971)


MODEL FOR EDUCATIONAL PLANNING
NEEDS IDENTIFICATION
Cluster A Functions:
Needs Identification
What Is
What Ought To Be
PRIORITY LIST OF NEEDS COMPILED
PROBLEM – POLICY TRANSFORMATION
Cluster B Functions:
Problem Definition
Problem Analysis
Writing Policies
Delineating Roles
DISCREPANCY REPORTING
CENTRAL INFORMATION SYSTEM
POLICY OBJECTIVES ASSIGNED
MONITORING
Cluster E Function:
Program Monitoring
Evaluating and Auditing
TACTICAL PROGRAM DESIGN
Cluster D Functions:
Program Design
Designing Programs
Applying Cost Effectiveness
POLICY – PROGRAM TRANSFORMATION
Cluster C Functions:
Generate Alternative Strategies
Program Selection
Developing Objectives and Selection Criteria
IMPLEMENTATION
ASSOCIATED MANAGEMENT INFORMATION SYSTEM
ACTION PROGRAM DESIGNED
CANDIDATE PROGRAMS SELECTED

of a system as related to possible consequences of action. This model tends to relate ideologies and operations by discriminating the components that are the premises of action. Figure 22 presents the purpose and output of each activity cluster; the output from one cluster becomes the input for the next.

For the authors, the Information System is the major data base of the model which articulates the particular clusters; whenever an activity cluster utilizes external information, the information becomes relevant to the entire planning system by entering the Information System. In subsequent planning cycles, any cluster may use any stored information.

A subset of the Information System is the Long-Range Planning Register (L.R.P.R.). This register contains: (1) groups of explicit statements of general long-range motivating factors, i.e., the factors which determine the ultimate purpose of the system, and (2) the facts, policies and values organized by the planning system. The Long-Range Planning Register is applied at various points in the model. Also providing input to the Information System are the Associated Management Information System (A.M.I.S.). The management systems are the specialized province of the decision makers in a particular educational situation, and include information pertaining to their institutional operation. Their input to the planning Information System is the primary means for incorporating feedback about operational programs/ (Bell, Hagans, Harper and Seger, 1971, p. 7-8).

Figure 22

Activity Cluster Purpose and Output (Bell, Hagans, Harper and Seger, 1971)

Functions	Activity Clusters	Purpose	Outputs Inputs
Needs Identification	A. Needs Identification	Increasingly, an objective needs assessment is an essential starting point for educational improvement. Title III of the Elementary and Secondary Education Act requires such an effort on a state-wide basis, for example.	Priority lists of needs
Problem Definition & Problem Analysis	B. Problem-Policy Transformation	System analysis techniques can be utilized to delineate problems on the basis of identified needs.	Policy objectives
Generate Alternative Strategies & Program Selection	C. Policy-Program Transformation	System synthesis techniques can be used to arrive at programs which will alleviate identified problems.	Candidate program
Program Design	D. Tactical Program Design	This function results in the implementation of a program.	Action program design
Program Monitoring	E. Monitoring	Increasing demands for accountability require the systematic evaluation of program achievement and auditing of the reliability of evaluation procedures. This function also provides data necessary for reassessment of needs.	Reports of discrepancies

From initial presentation of their model, Bell et al. go further into a detailed analysis of each cluster. As has been discussed, such a model could be the basic planning model used in the educational system. As described by the authors, it can be applied at different levels of the system which can consider the communicability of the process throughout the system. The use of such a planning model could change the pattern of crisis management so familiar to educators and administrators. The need for long-range planning has been well expressed in the literature. Therefore, assuming that this model with its useful characteristics can be an answer to such a need, it should be further studied on the basis of its potentialities according to the implementation of a new model of special education.

The different components of the model for planning can be classified according to their contribution to the process. There are direct input components, indirect input components, throughout components, indirect output components and direct output components. Figure 23 summarizes this classification and is an attempt to explain the importance of the components in the planning process. The important feature of this classification is the differentiation of direct and indirect inputs, and within the first type of inputs, the discrimination of internal and external inputs. Internal direct inputs refer to the Long-Range Planning Register and the Associated Management Information System. These two components are the basic source of organizational data, they are related to statements of long-range motivating norms (A.M.I.S.). They are direct

Figure 23

Classification of the Components
of the Planning Model

TYPE OF COMPONENTS		COMPONENTS
DIRECT INPUT	INTERNAL	- Central information system with Long-range planning register (L.R.P.R.) - Associated Manag. Inf. System (A.M.I.S.)
	EXTERNAL	- Needs identification
INDIRECT INPUT		- All clusters from the preceding cluster
THROUGH PUT		- Priority list of needs - Problem-Policy transformation - Policy objectives assigment - Policy-program transformation - Candidate programs selection - Tactical program design
INDIRECT OUTPUT		- All clusters for the next cluster
DIRECT OUTPUT		- Action program designed - Implementation

inputs because it is in the nature of organization to relate their plans to established criteria or norms derived from past actions. They can be classified as internal due to their specificity to the institution's operation. L.R.P.R. and A.M.I.S. are both to be formulated in an operational way. In education L.R.P.R. refers to the area of goals and A.M.I.S. to prevailing administrative rules. External direct inputs are to be found in the process of needs identification. Again the model takes these data as direct inputs but they are data derived from outside of L.R.P.R. and A.M.I.S. They can be feedback data on the evaluation of actions or programs or new data (change in the environment) from outside of the system. Neither internal or external inputs are static; they both have levels of change due to monitoring devices within or outside the system. The other elements in Figure 23 are derived directly from the authors' interpretation of their model. Indirect input - throughput - indirect output - are related to internal relationships in the model. The action program designed cluster is seen as a direct output as it goes further than the model itself and affects directly the educational system as actions to be implemented.

It is assumed that, in a simplified way, the challenge of any ongoing planning process is to relate external direct inputs to internal direct inputs. In other terms, a relation should exist between needs identification data and organizational goals and administrative rules. This relationship is directly related to the adaptive property of the system. If great discrepancy exists between external data (needs) and organizational goals and rules, the system is confronted with needs for wider changes and needs for greater adaptive potentialities to cope with these needs. This discrepancy factor is at the center of any type of change within a system where such sophisticated planning processes are applied. The point to be developed here is the necessity to establish communication and flow of data from external and internal sources to pursue planning processes. This brings the need for structured inputs.

The classification of planning components can be thought of as giving the premises for the specification of the planning processes to be developed in order to facilitate the implementation of the model of special education elaborated in this study. In other words, the differentiation of types of inputs and their significance illustrates the process of change which is at the root of the model of special education. The actualization of the model should start at the input level of the planning model; a strategy of input description should be developed. The model of special education elaborated in this thesis is thought to be comprehensive enough to determine the framework of needs identification whether the inputs are internal or external.

Assuming that a planning model, such as the one developed by Bell, Hagans, Harper and Seger, is used in the educational system, the strategy for implementing our model of special education should focus on a cluster of direct-input-identification to be related to the general model. The basic assumption of the approach is that the planning process will be directly affected by the presence of specific inputs based on the model of special education developed in this study; that is, the entire process of planning (all clusters) will be affected and determined by the new nature of the information at the L.R.P.R. and A.M.I.S. level and also by a specific way of identifying external needs. In some ways this is a deliberate attempt to bias the process by identifying the input that should prevail in planning. Nevertheless, the intention is to show that the faster way to implement the new model of special education is not to implement new programs or actions. Implementation should be the output of a planning process that has the characteristic of intrasystem and intersystem cohesiveness. Therefore changes that should be initiated ought to be at the input level and freedom of throughput should be assumed by the system.

The process that ought to be developed follows the same logic as Beery's (1974) Catalyst model presented in Chapter IV. The beginning of all actions (planning for example) should be based on the sharing of data; therefore, the data for special education to be shared could be established by a cluster of input determination. The processing of these inputs and determination of output should be left to the agents in the field which participate in the planning task.

To summarize, special education planning should not differ from regular education planning. The functional integration of special education and general education should be achieved first at the planning level. Therefore the planning model presented here, with its specific characteristics, is an example of a universal model that should be used. The process of change that is needed for the implementation of the new model of special education should be totally related to the planning model. This relation lies in the specification of the inputs that should generate the process. Therefore, the next part of this chapter will be devoted to the specification of a cluster to be added to the planning model for inputs determination.

THE INPUTS DETERMINATION CLUSTER

In the planning model, the first cluster - Needs Identification - can be regulated or determined in part by the system's long-range goals that are part of the L.R.P.R. Educational goals can be regarded as derivations of social expectations. The information involved in the L.R.P.R. is related to societal factors that influence the evolution of education. Therefore, according to the model, the need identification process is affected, in the screening of expectations, by the nature of the long-range goals and values included in the L.R.P.R. This relation establishes the modes of questioning practices in order to gather needs information; that is, needs are identified on a certain typology included in the value system of the L.R.P.R.

It is assumed that the planning model relies on data that are related to the three inputs identified as direct inputs for the system. These inputs contain the important type of information with which the system is to proceed to planning. These inputs are direct internal inputs (L.R.P.R. and A.M.I.S.) and direct external inputs (needs). As has been described, there is a regulating relationship between L.R.P.R.

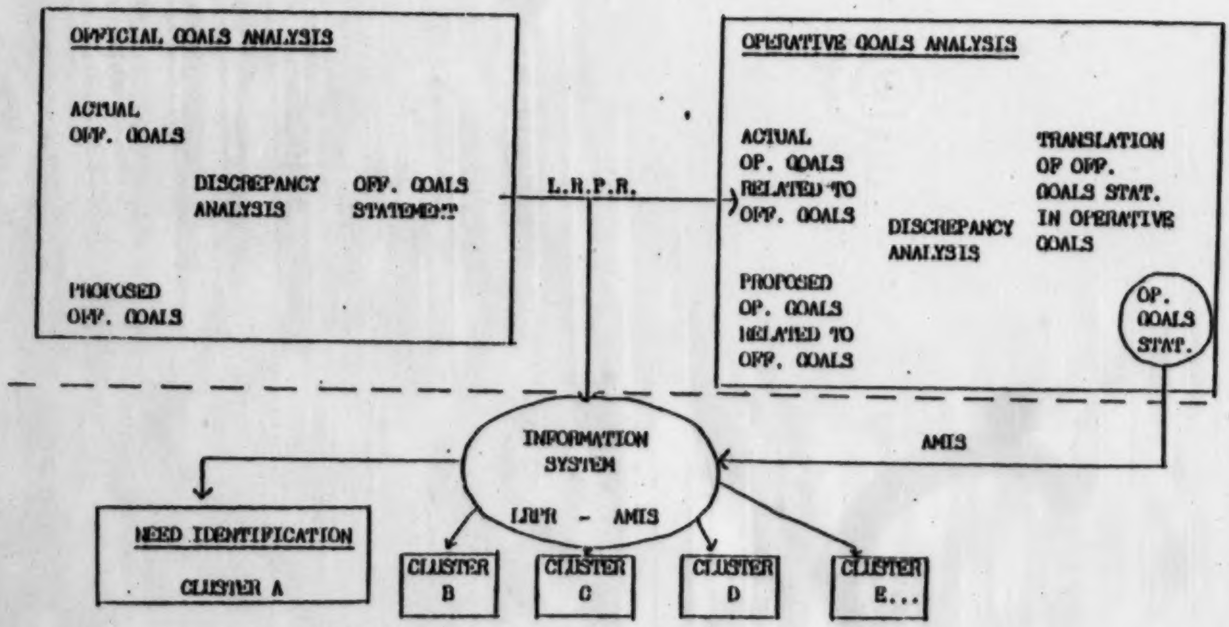
and needs identification. On the other hand, A.M.I.S. is more directly related to the processing of data derived from needs identification and can be seen as stability maintenance data from within the institutional framework. Data included in the A.M.I.S. are related to organizational patterns, rules or to some extent to institutional technology. They represent the current state of expertise in the system, in terms of its modes of operationalizing organizational goals. If data from L.R.P.R. and need identification are elaborated in a "shall" statement of development, A.M.I.S. data are related to the "should" statement in the process.

It appears from this analysis of the three types of inputs that a specification of the model of special education, in terms of data to be included in the L.R.P.R. and A.M.I.S. and also certain information on needs identification, could constitute a basic change orientation. This specification of inputs constitutes the cluster to be included in the planning model in order to generate the process of change in the educational system for achieving the implementation of integrated special education. This cluster relies on the differentiation of goals discussed in Chapter IV. There are two types of goals corresponding to L.R.P.R. and A.M.I.S. type of data. Official goals can be related to L.R.P.R. information. They are global statements of the system goals and values; A.M.I.S. is concerned with operative data and procedures and can be related to operative goals. Therefore, the cluster will be constituted of an exhaustive list of official goals to be included in the L.R.P.R. and by related operative goals to be inscribed in the A.M.I.S. Finally, projection of needs identification statements as derivates from both L.R.P.R. and A.M.I.S. will be presented. It is assumed that such an exhaustive list includes the vital ingredients of the conceptual model of special education. Starting with such organized inputs, needs identification and further planning process shall be determined in such a way that favorable change should occur in the educational system.

Figure 24 represents the cluster for inputs determination. This model illustrates the prerequisite of need identification which leads to the structuring of the information system and the elaboration of L.R.P.R. (official goals) as well as A.M.I.S. (operative goals) data. It is important to remember that this cluster is elaborated on the base of the general planning model of Bell, Hagans, Harper and Seger (1971). The top part of Figure 24 constitute the specificity of the cluster. It is followed by the sequence of the general model in order to enlighten the pre-planning or prerequisite nature of the cluster. Any educational system that intends to start the planning process in order to integrate special education should in the first step go through the two stages of information system determination of data that constitute the cluster. In essence the cluster is a two level goals analysis in order to feed the information system with pre-organized data. The first step is to study the discrepancies between actual L.R.P.R. data or official goals and proposed official goals presented in this study. This analysis should generate a list of adapted or translated official goals statements that are stored as L.R.P.R. in the information system and used at every step of the planning processes. Also these statements are the inputs for the

Figure 24

The Cluster for Inputs Determination


OFFICIAL GOALS ANALYSIS
ACTUAL OFF. GOALS
DISCREPANCY ANALYSIS
OFF. GOALS STATEMENT
PROPOSED OFF. GOALS
L.R.P.R.
OPERATIVE GOALS ANALYSIS
ACTUAL OP. GOALS RELATED TO OFF. GOALS
DISCREPANCY ANALYSIS
TRANSLATION OF OFF. GOALS STAT. IN OPERATIVE GOALS
PROPOSED OP. GOALS RELATED TO OFF. GOALS
OP. GOALS STAT.
AMIS
INFORMATION SYSTEM
LRPR - AMIS
NEED IDENTIFICATION
CLUSTER A
CLUSTER B
CLUSTER C
CLUSTER D
CLUSTER E...

second step of the cluster - the operative goals analysis. At this stage actual operative goals are analysed in their relation to official goals statements derived from the first stage. This analysis relies on the study of the discrepancy between actual operative goals and proposed operative goals. Finally, the output of this analysis is a set of operative goal statements to be stored in the information system as the A.M.I.S. data. Again, these data should be referred to in every stage or clusters of the planning model.

The use of such a cluster of goal-related inputs prior to the planning process, is thought to be related to the development of a prerequisite set of data to be referred to in the determination of action programs output. It does not predetermine the nature of such programs but facilitates their integration into a framework based on the premises of an integrated special education delivery system within the educational system. At the outset of such a purpose is the perspective of a better educational system while at the center of the planning process there will tend to be facilitation of participation and intrasystem cohesiveness.

The cluster is conceived to be an exercise in adaptation of the official and operative goals of an educational system to a set of related goals based on the conceptual model of special education, in order to elaborate a constant set of information to be referred to in the planning process. The list of goals that follows represents a comprehensive check list for such adaptation. It is divided in terms of official goals to be analysed to determine the L.R.P.R. part of the information system and in terms of operative goals for A.M.I.R. elaboration. Table 9 represents

Table 9

Proposed Goals Derived From the Conceptual Model of Special Education For The Inputs Determination Cluster

OFFICIAL GOALS	OPERATIVE GOALS	POSSIBLE NEEDS
1- Self-realization of all individuals in the system.	1.1 Individualized instruction-non-graded schools - continuous promotion. 1.2 Curriculum designed on the need satisfaction - capacity development and information strategy. 1.3 Organizational growth patterns - personalized actualization for organization members. 1.4 Need-based definition of exceptionality. 1.5 Competence based intervention.	- Non segregative education. - Respect of children learning rythm. - Collective nature of learning. - Competence rather than deficiency based interelationship. - Growth possibilities for all. - Emphases on capacity development rather than strict academic achievement. - Parents participation to the growth process.
2- Equality of opportunity for learning experience.	2.1 Instructional system approach. 2.2 Evaluation of children based on treatment interaction with the development process. 2.3 Pre-school developmental services. 2.4 Integrated development in the school and the community 2.5 Free developmental services.	- Instructional system needs for specific community - Individualized student evaluation - Social integration - Physical integration - Cooperative instruction - Cooperative model for agents training. - Comprehensive analysis of developmental potentialities of a community
3. Functional integration of developmental interventions.	3.1 Intrasystem functional integration of all educational intervention taking the basic school as the integration 3.2 Intersystem functional integration of all developmental agents in the community public services.	- Availability of instructional system in every schools - Cooperative intervention - Agents interactions - Comprehensive developmental services planning - Interelatinship of agents training
4. Openess of the educational system to community	4.1 Community integration of the school 4.2 Permanent educational services to the community	- Schools geared on local needs and realities - Community participation to education as agents and as clients - Information to the community
5. Decentralized integrated long-range planning and decision-making	5.1 Local long-range planning 5.2 Clients and agents participation in planning and decision making 5.3 Securizing and helping control 5.4 Provincial level and local level funding, program budgeting with non-categorical process.	- Local autonomy - Equality of resources - Integrated process of participation of agents

the list of proposed official goals and the related operative goals. All operative goals can be directly translated in terms of administrative rules. Finally, for the purpose of illustrating the entire process of the cluster as affecting the first step of the general model, examples of needs identification are shown in the last part of the table.

The specification of all the goals statements and needs propositions included in Table 9 are to be found in the preceding chapters of this study. As they are presented they constitute very general statements, and it is important to specify their meaning by a comprehensive reading of the preceding text. Nevertheless, the content of Table 9 should be seen as a check list for the analysis of actual goals of an educational system in terms of their discrepancies with goals that follow the conceptual model of special education. The practice of such analysis will be illustrated in Chapter VI by the use of the check list for the study of several educational systems.

As a final note to this chapter, it could be very significant to quote the authors of the general planning model on their view concerning the implementation of their model.

> "The following suggestions for implementation of the model are based on a view of educational systems which assumes that a proper balance must be struck between independence of particular educational systems, or components of systems, and interdependence between components and systems. Initially, there must be a sufficient degree of autonomy to permit local control of intrasystem processes and relationship. Curriculum must be effective, and the needs of each student within the institution or the district must be met as completely as possible. Further, effective intersystem relationships

> must be maintained simultaneously. That is, at the same time that each school and district has enough autonomy to assure a flexible and organic program for its clients, it must be well enough integrated into the larger educational system to achieve overall (e.g., province wide) educational objectives. Various subsystems and strata of educational institutions must cooperate for the attainment of common goals.
>
> The institution and functioning of the planning model also is predicated upon open, as opposed to closed or self-sufficient educational systems. Participating educational systems must respond to pressures, both direct and indirect, from the wider social, political and economic environment. They must adapt to those pressures, constantly checking to be sure their operation is appropriate for the society and the political systems they serve.
>
> Implementation assumes that those operating the model are committed to the participation of individuals and component agencies of the system in decision-making. This requires a commonly understood vocabulary, and in addition, implies the need for training to provide planners with a common semantic background. The planning system itself is designed to be organic, flexible and acceptable." (Bell, Hagans, Harper and Seger, 1971, p. 27-28).

This view of the implementation of the model could also be seen as basic goals in the information system of the general model. They are very similar to the inputs determination cluster, prerequisite nature of goals analysis. If the goals related by the authors, to the implementation of the model are not to be strived for by the educational system, there should not be an attempt to use such a model. This point is essentially the basis for the use of the general model for planning with the cluster elaborated in this chapter, that is the intention of the educational system to proceed to long-range planning of its development.

Chapter VI

THE USE OF THE MODEL FOR THE ANALYSIS OF DIFFERENT EDUCATIONAL SYSTEMS

This chapter is concerned with the analysis of different educational systems and their special education delivery systems. It constitutes also an example of the use of the inputs determination cluster and of the proposed goals developed in chapter V in order to organize the analysis. The conceptual model of special education cannot be subjected to experimentation without affecting a complete educational system, such an experimentation being far beyond the limits of this study. The aim of this chapter is to use the proposed goals of Table 9 developed in chapter IV as derived from the conceptual model of special education in order to analyse, with the use of the inputs determination cluster, the degree of discrepancy between several educational systems and the model of special education. This analysis does not pretend to validate the model but to illustrate some divergence between actual practices and the conceptual model of special education in order to show the degree of change necessary for the implementation and experimentation of the model. It is also assumed that the use of the list of proposed goals and of the inputs determination cluster will show the level of integrative orientation of the educational systems under study. If the cluster is designed to generate a process of change for the integration of special education as a regular functional part of the school, it should also permit the evaluation of the degree of integration achieved in the system. Integration as discussed in this report is a major goal in the model development. Therefore it appears of interest to verify the degree of integration achieved in several educational systems in comparison with their level of discrepancy with the model of special education. A more rigorous study could be done in order to verify the hypothesis that educational systems that show a high level of discrepancy at the goals level such as analysed with the inputs determination cluster are systems with a low degree of integrative practices. No attempt is made to verify this hypothesis in this report. The aim of chapter VI being more related to illustrating the use of the list of proposed goals and of the inputs determination cluster. Therefore the analysis of several educational systems' official and operative goals in terms of their relations with the goals of Table 9, will constitute the basic tool to be used in this chapter.

The methodology used in this analysis is simple, the data collected from each educational system are analysed in terms of their discrepancies with each proposed goal (Table 9) derived from the model of special education. The discrepancy analysis is conducted according to the inputs determination cluster. The data collected from the educational systems were related to the official and operative goals of these systems and to the practices in their special education delivery system. The educational systems that will be studied are from Sweden, Holland, France and the Province of Quebec. The collection of data from these systems was made in different surveys. The three European countries were studied in two field trips; one in France (1974) for three weeks, and a second one in Sweden, Holland and France (1976) for three weeks also. The Province of Quebec system was studied on a longer time span (1973-76), since the researcher's residence and work experience in the field was in that Province. Table 10 shows the nature of the visits and interview or discussion that constituted the surveys made in Europe. A total of 61 visits or meetings were held in order to study these systems. In addition to these meetings, a collection of written material was acquired and reviewed.

The purpose of this chapter is not to give a comprehensive view of the different educational systems nor compare them with one another. Where general information on the system is relevant this will be integrated in the analysis. The analysis will rely heavily on quotations from and interpretations of official documents gathered in the surveys. In addition to official statements, there will be some comments derived from meetings and fieldwork experience. The analysis will be based on the study of the system goals from the list of goals in Table 9. Therefore, it will be limited to observation on the elements of Table 9. Finally there is no quantitative comparison made between educational systems. No attempts are made to measure or score these systems, the analysis being strictly qualitative.

Table 10

Nature of the European Survey

Type of visit or meeting	Sweden	Holland	France
- Regular Schools (with integrated individuals)	3		
- Regular schools (with identified special class)	3		1
- Special schools	2	2	Institution: 2 Day schools: 2
- State or local education administrators or inspectors	2	1	2
- Social affairs administrators	1		1
- Headmaster	5	2	4
- Teachers	4	1	2
- Specialist in supervision, special education	5		1
- Researchers	1	1	2
- Social, medical or psychological specialists	1	2	4
- Teacher trainers	1	2	1
TOTAL	28	11	22

SWEDEN

The organization of the Swedish educational system is presented in Figure 25 while Figure 26 indicates the school administration structure of that country. The fundamental elements of the Swedish school system are the comprehensive elementary 9-year school and the gymnasium secondary school.

> The school reforms introduced over the last 25 years have given all children and young people the right to an education for at least nine years. They are also formally required to complete the 9-year compulsory comprehensive, "Basic School". All pupils also have the right to continue their education at the gymnasium-level school for one or more years. This right is currently exploited by about 90% of the annual cohort of 16-years-olds. Adults wishing to complement their schooling can do so within the municipal adult education system (studies following the Basic School and gymnasium level curricula), unless they prefer the free forms of study provided by the popular education associations and study circles. At the same time as the right to study has been extended, a new view has developed as regards the organization of studies. All children, it is thought, should be allowed to attend ordinary classes in ordinary schools. Pupils with educational difficulties and different types of handicap previously attended special classes (remedial classes), or special schools for the handicapped or retarded. Now they are helped to complete their schooling at a Basic School or gymnasium-level school, together with pupils with no special difficulties or handicaps. (Stenholm, 1975).

Table 11 gives some statistics on this integration of a very large number of special education students in the regular schools. The regular school system accounts for the education of 97.8 per cent of the pupils of which 17.6 per cent are educated in special classes within the ordinary school. Only 2.2 per cent of the pupils are not in ordinary

Figure 25

Diagram of the School System
in Sweden

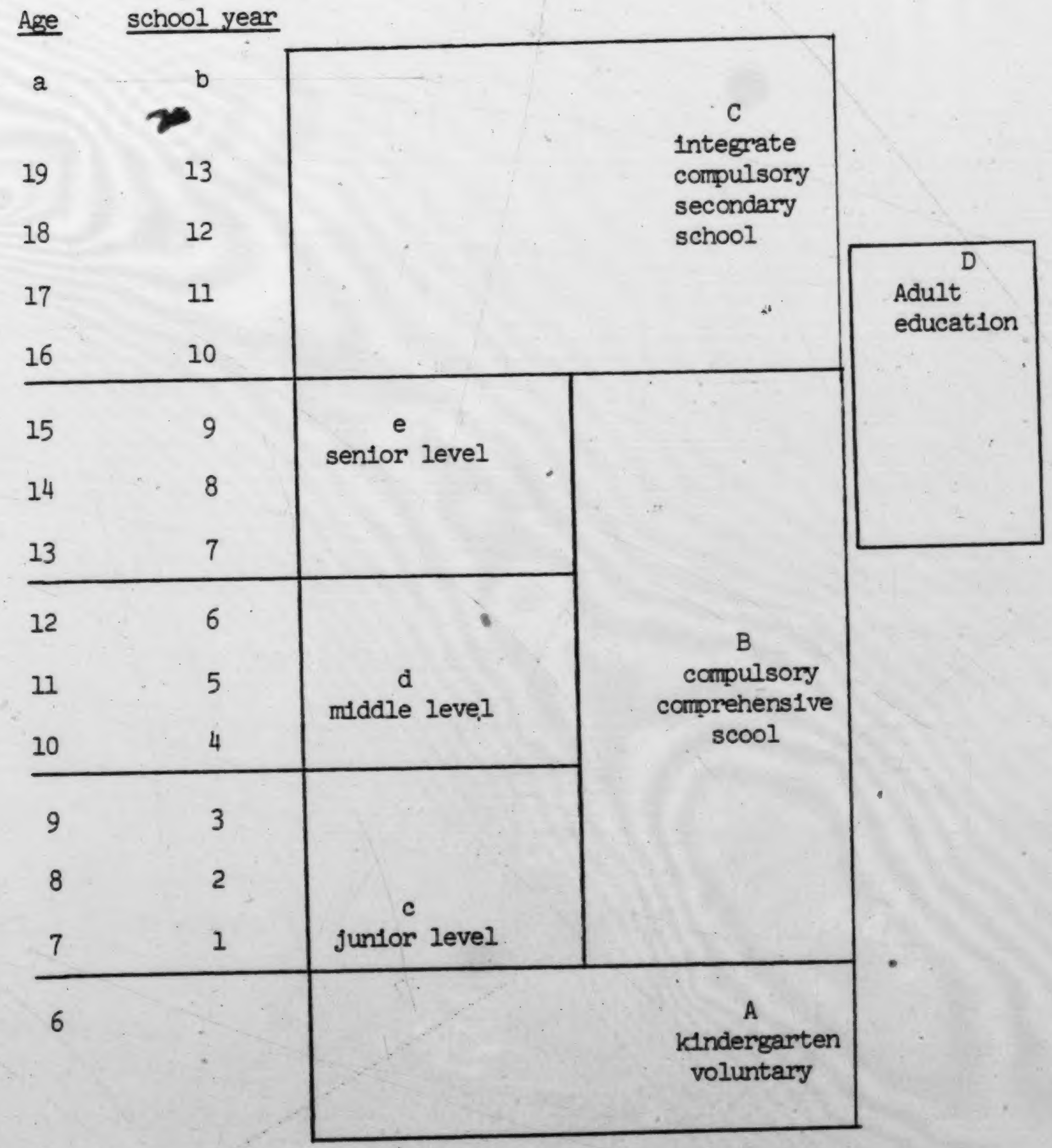
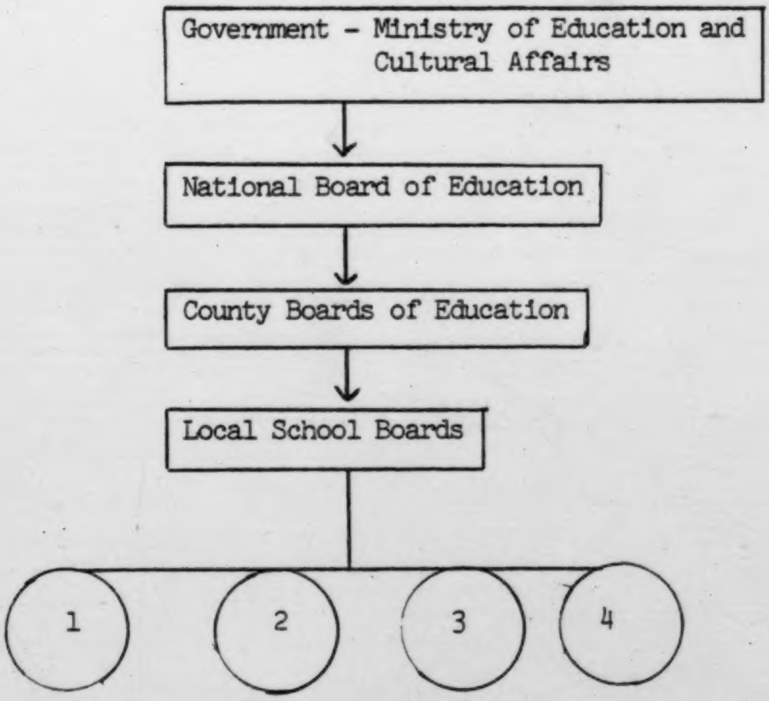

Age
school year
a
b
19
13
18
12
17
11
16
10
15
9
14
8
13
7
12
6
11
5
10
4
9
3
8
2
7
1
6
C
integrate
compulsory
secondary
school
D
Adult
education
e
senior level
d
middle level
c
junior level
B
compulsory
comprehensive
scool
A
kindergarten
voluntary

Figure 26

School Administration in Sweden


Government - Ministry of Education and Cultural Affairs
National Board of Education
County Boards of Education
Local School Boards
1
2
3
4

1- folk high school

2- upper secondary school

3- comprehensive school

4- municipal adult education

Table 11

Distribution of Special Education Pupils in the Swedish School System in Percentages (1973-74) (Compulsory School, Grades 1-9) (Wessman, 1970-1974)

ORDINARY SCHOOL			SPECIAL SCHOOL				
Ordinary class	Ordinary class	Special class	Blind	Physically handicapped	Emotionally disturbed	Deaf	Mentally retarded
Special auxiliary teaching	Separate special teaching						
80.2		17.6	0.08	0.12	0.15	0.25	1.6
97.8			2.2				

schools. Therefore, over 80% of the special education students are in ordinary classes.

1- Self-realization of all

The first section of the Swedish Education Act defines the goals of comprehensive school as follows:

> - To impart knowledge
> - To develop skills
> - In collaboration with their families, to promote the development of the pupils into happy individuals and competent and responsible members of society.
>
> The pupil is to be given the greatest possible help at school in developing according to his individual capacity and in motivating his own interests within a framework of cooperation. (National Swedish Board of Education, 1975).

> The main feature of the Swedish system may be expressed in a pedagogical slogan, "Pupil first!" Thus the aim is to give each pupil individual instruction which encourages his all-round development, and which is adapted to his aptitudes. This means that methods of work in the ordinary school are becoming more like those formerly considered characteristic of special instruction. It can no longer be said, therefore, that a pupil cannot satisfy the demands made by the school. On the contrary it is the school that shall satisfy the demands of the pupil. (Wiseman, 1974).

1.1 Individualized instruction. Perhaps the most important feature of the Swedish education system is its orientation toward individualized instruction.

> One of the main goals of "the new school" is a type of instruction so arranged that it makes possible a strongly individualized development of the pupils with regard to their natural abilities, needs and interests. The realization of this goal requires, in turn, a highly individualized type of instruction, supported by strong pedagogical and psychological assistance and by a rich supply of learning aids. (Lund, 1968).

> Individualization within the framework of the class, and access to special teaching, are important aspects of the effort to create the right conditions for a course of study suitable to the circumstances and needs of these pupils. By individualized teaching in the ordinary class it is possible to reach the individual pupil, even if he has to struggle with certain difficulties by reason of his handicap. Even so this presupposes that the regular training of the teacher should impart a basic knowledge of how to deal with the difficulties of the individual pupil. (National Swedish Board of Education, 1973).

> The comprehensive school timetable has now been made to include what are known as extra periods during which larger or smaller groups can be assembled than is normally the case, the composition and size of each group depending on the degree of individual guidance needed and the nature of the teaching situation generally. In keeping with this principle, it is recommended that the size of such a group should not be fixed on a long-term basis.
>
> Pupils who cannot obtain sufficient help during these periods can be offered some form of special teaching. (National Swedish Board of Education, 1973).

Individualization of education is also reflected in special education in Sweden by a wide variety of strategies of intervention based on the child's needs.

> Comme toute l'activité scolaire repose sur la notion d'individu, sur les dispositions individuelles de l'élève, l'enseignement spécial sous ses différentes formes constitue tout naturellement une composante très importante de l'enseignement en général. Les élèves qui pour diverses raisons ont des difficultés scolaires bénéficient de plus d'aide et de direction qu'autrefois.
>
> Cet enseignement peut avoir lieu pour un ou plusieurs élèves et même être coordonné avec la classe ordinaire. Ou bien le professeur spécial viendra en classe et aidera l'élève pendant certaines heures, ou bien l'élève ira dans une clinique scolaire où on lui dispensera un enseignement de soutien. Cela s'appelle enseignement spécial coordonné, celui qui devra être essayé en premier pour permettre dans toute la mesure du possible à l'élève de continuer à fréquenter sa propre classe.

Mais pour ceux qui connaissent des difficultés plus sérieuses, le placement en classe spéciale, dont le nombre d'élèves est moindre, pourra se révéler nécessaire. Il y a différentes sortes de classes spéciales: classe d'assistance, classe pour les handicapés de la vue, classe pour les handicapés de l'ouïe, classe d'observation, classe pour les dyslexiques et classe pour les handicapés moteurs. Les élèves ayant des difficultés scolaires complexes peuvent bénéficier de plusieurs de ces enseignements spéciaux.

Pour faciliter l'individualisation du travail scolaire, l'école se voit accorder des ressources accrues par le moyen de ce qu'on appelle les heures supplémentaires. En d'autres mots, les professeurs auront davantage d'heures dans certaines matières que les élèves. Ces heures excédentaires leur permettent d'enseigner en petits groupes ou de guider des élèves seuls. Ces heures supplémentaires avaient surtout été utilisées précédemment pour l'enseigenement par semi-classes. Dorénavant, le professeur peut diviser la classe en groupes de grandeur variable, selon les besoins particuliers des élèves. Ceci vaut surtout pour le cours élémentaire et le cours moyen. Dans le cours supérieur, l'école a maintenant plus de liberté pour utiliser de différentes manières les heures supplémentaires, par exemple en vue d'un enseignement auquel participent plusieurs experts ou assistants-professeurs. (Forsslund-Ljunhill, 1971).

This new way of looking at things is manifested directly in the ordinary school by the abolition of the pass-fail concept, and by the rule that pupils shall, as a rule, be promoted to higher classes. (Wessman, 1974).

1.2 Curriculum design. There is in Sweden a tendency to create uniformity in subjects and courses but also a respect for children's progression rate of learning.

Teaching in Sweden follows centrally compiled curricula for the Basic and Gymnasium-level schools. A necessary condition for integration is that the objectives, general instructions, and main phases laid down for the different subjects should be so drafted that they can be applied to all pupils, regardless of their physical and mental capabilities. By the terms of these instructions, work at the school shall be based on principles of individualization and pupil activity. Matter should be presented in a concretè manner, and the pupils stimulated to cooperate, so that all can take part according to their personal aptitudes and interests. (Stenholm, 1975).

> At the secondary level, pupils who find it difficult to cope with all subjects at once can temporarily drop one or two subjects to leave more time for their other work. If they wish, they can then, on completion of the gymnasium-level school, read the subjects they missed. A note is made on their certificate that they have taken an "abbreviated study course".
>
> Pupils who have been ill, or need extra help in their school-work for some other reason, can obtain auxiliary instruction for a shorter or longer period. Such instruction is intended to make it easier for the pupil to manage the entire gymnasium-level course.
>
> By the terms of the Education Act, a special quota of teaching hours is allocated at the gymnasium level for the special teaching of children with physical handicaps. Special measures can also be taken for pupils with intellectual handicaps. Following a concession made in 1974, pupils who have difficulty in following instruction can be exempted from certain of the subjects laid down by the curriculum for a given line, and devote increased time to other subjects. Since 1974, studies in accordance with a specially designed curriculum are organized on an experimental basis for pupils on the vocationally geared lines who by reason of a physical handicap have difficulty in availing themselves of some of the instruction given. (Stenholm, 1975).

> It is argued that schooling in Sweden is heavily anchored in a mechanistic view of development. The basic goals for compulsory education however, are more representative of an organismic way of thinking. This causes a conflict, which makes it practically impossible to fulfill the aim of giving a stimulating and enriching milieu for individual development. Special difficulties are caused by a marking system, which tends to create uniformity in subjects and courses (curricula). What is needed is greater freedom for each individual to form his own education in cooperation with people in his neighborhood. Given such possibilities, school should be more successful in helping the so-called educationally disadvantaged. (Emanuelsson, 1974).

1.3 Organizational growth. Two elements were observed in the Swedish educational system that can be related to organizational growth process:

1- All school personnel and most local school board administrators have to teach several periods a week to students. Therefore, most of the administrators are in permanent contact with children and other teachers.

2- High level cooperation between teachers. It was not possible to observe an organized and operationalized process of organizational growth as defined in Beery's (1974) Catalyst model. One factor that can be confirmed by the meetings and interviews of the survey is the preoccupation of the system to increasingly define teachers as members of a collectivity of learners.

1.4 Definition of exceptionality. In the widest sense of the term, the word "handicapped" is used to designate those pupils who experience difficulties of varying nature and extent in their schooling, as the result of environmental or hereditary, physical or mental circumstances. Every teacher can encounter in his class one or several such pupils, and should therefore know something about the existence of such difficulties, their background and symptoms. A development in accordance with the principle of integration even in respect of pupils with relatively severe handicaps makes this absolutely necessary; every teacher must be equipped, in the ordinary classroom situation, to meet the special problems involved in the handicap of such a child. (National Swedish Board of Education, 1973).

1.5 Competence based intervention. Since the principle of normalization has its origin in Sweden, the intervention system for mentally retarded persons tends to follow the basic competence approach rather than to focus on deficiencies. Although the competence approach is not entirely prevalent in the educational system the Swedish educational system is directly and profoundly marked by experience with the education of the mentally retarded. The transfer of the competence based intervention approach is on its way for all types of special education.

Remarks: This analysis of the first type of official goal and related operative goals shows that Sweden has gone far in the implementation of the individualization of education. Also, according to several specialists in education of this country the fundamental aim of the Swedish system appears to follow an organismic model and are related to self-actualization principles. Although the self-actualization aim seems to be applied almost exclusively to children, there are actions being taken to expand the concept to all members of the educational system. Organizational growth has to be worked out. On another basis, curriculum and evaluation (marks) are in many ways subject to revision in Sweden. It appears that the state level rules for evaluation or marking are controversial and highly discussed as indicated by Emanuelsson's study. There seems to be a fundamental respect of the individual child in the Swedish educational system, although it is not possible to find a well-articulated definition of exceptionality based on a need approach.

2- Equality of opportunity

The two basic types of schools in Sweden, the elementary school (Grundskolan) and the secondary school (Gymnasieskolan) are both integrative types of school. All students are physically, and as much as possible pedagogically integrated, in the same school. The basic aim of such schools is the equality of learning experience for all. As Marklund (1970) indicated in a comprehensive study of the development of the Swedish system, "The pedagogical differentiation, often called individualization, was to be carried as far as possible, while the organizational differentiation was to begin as late as possible". Therefore, the schools ought to integrate all children in a basic individualized pattern avoiding early group segregation and social inequality of opportunity as pointed out by Lund:

> The modern Swedish school aims at such a method of work that each student can obtain what he requires in respect of teaching, upbringing and care. This means an epoch of educational reform, characterized by new thinking as regards, for instance, the creation of greater opportunities in the system as a whole also for children and young people with some form of special difficulty or handicap.
>
> The philosophy that has constituted the driving force behind the expansion of the public school system, and which has come to be accepted by more and more pedagogues as well as parents, is that of an equal education for all children. By the 1962 decree of the Riksday authorizing a general, comprehensive and obligatory nine-year schooling, the earlier differentiation between the kinds of education pupils should receive (according to their intellectual ability) was moved up to a point where the young people, themselves, are better able to make a decision about continued education. (Lund, 1968).

> Le grand objectif pourrait se résumer en une phrase: par une éducation où chacun a toutes ses chances et tous ses choix, former un être épanoui, ayant la meilleure qualification et la meilleure capacité d'adaptation possible au changement, citoyen au plein sens du terme au sein d'une société juste. (Richard, 1971).

2.1 Instructional system approach. Working methods in comprehensive school vary from teaching in full class, half class, independent work in small groups led by the teacher, and individual work. Class instruction predominates. The element of group work can vary from one school to another.

The content of the curriculum gives teachers considerable scope for initiatives of their own in designing and carrying out their teaching.

Combined work can be arranged in larger pupil groupings, with teams of teachers guiding the pupils. Prolonged lessons, e.g., 2 X 40 minutes, are a common practice at middle and senior levels.

Periodic studies of consecutive subjects are a common practice where orientational subjects are concerned. Another practical working method is that of collective teaching in the form of projects or spheres of interest of an interdisciplinary nature.

Most school work is done during school hours. Training in study technique helps to achieve good study results. Pupils are also given homework, but the curriculum recommends that this be organized as far as possible on a voluntary basis. (National Swedish Board of Education, 1975).

Special teaching, and the different types of special school, are thus organizational and pedagogical arrangements designed to complement the work of pupil welfare and individualization, when the resources of the ordinary class or school prove inadequate. The series of measures available must be flexible; it must offer opportunities of choice and combination, and it must be capable of adjustment to suit the individual. Ultimately, every single measure taken must be based on careful deliberation as to the needs of the individual child and assessment of the child's own capacity. (National Swedish Board of Education, 1973).

In Sweden, as in many other countries, it has become increasingly difficult to give any clear definition of special teaching. The best definition at present would seem to be the actual scale of resources available, i.e., 0.4 hours per week per pupil, or 30 hpw per 100 pupils, for the reinforcement of teaching, over and above the weekly hours provided by the timetable for each particular grade, level and type of school. (Stenholm, 1975).

Separate or co-ordinated special teaching, (remedial teaching), is utilized when the child's own capacity is found to be inadequate in the ordinary classroom situation, i.e., when the functional disturbance is such that it clearly affects the pupil's overall performance (while remaining only moderately severe). Separate special teaching should not involve a burden over and above the pupil's regular work in the school, but should be given parallel to his regular working routine. Separate special teaching is provided sometimes in the form of "clinic" teaching. "When a teacher works entirely or largely in providing separate special instruction to individual pupils, he is said to be working 'in a clinic'." This is a question of training functions and skills under expert guidance for certain periods, while for the rest of the time the pupil takes part in regular instruction in the class.

There is now a trend towards separate special instruction as a complement to, or in place of, teaching in a special class; the National Board of Education considers that this trend should be encouraged in every way, since it means less interference with the child's school situation than transfer to a special class.

The new curriculum now permits the utilizing of specially trained teachers in a variety of ways, not just in special classes and clinics. In some municipalities, special teachers take both "clinic" teaching (with individual pupils) and go into the regular classroom during certain periods, with the regular teacher, to assist handicapped pupils in their work. Such a teacher then functions as an assistant both to the teacher and to handicapped pupils (individually or in small groups).

When a pupil cannot handle his situation with the help of individualization or separate special instruction, then it is important both for the child and for the school that it should be possible to place him in a special class, which offers specially adjusted study schedules and special functional training, and where the pupil's total school situation can be considered and modified, both pedagogically and socially.

In the case of handicapped pupils suffering from severe functional disturbances, which decisively affect their total performance and necessitate as a rule modification to the external environment, and a concentration of resources of staff and technical aids, then a wider range of possible action is required; here there is a need for the facilities available in the special schools for the blind or deaf students. (National Swedish Board of Education, 1973).

2.2 Evaluation of children. A special form of support, and one that constitutes at the same time a period for diagnosis, is the running-in or "familiarization" period incorporated in the Basic School following entry from the preschool. During the first weeks of the term, children are taught in smaller groups than the regular whole class or half-class, which gives the teacher an opportunity to concern herself a great deal with each pupil, and observe them all in detail at their school-work. A medical examination, and a psychological examination, are made in conjunction with this period. The familiarization period is handled in collaboration with the pre-school and with parents.

Corresponding familiarization periods are arranged on the transition from the Lower to Middle and from the Middle to Upper Level. They have a dual purpose, namely to make the transition between levels easier for the pupil, and to give the teacher an opportunity to study his individual pupils, in order to be able to plan their school-work better, and arrange any supportive measures that may be necessary.

At the end of the familiarization period in Grade 1, a conference, known as a pupil welfare conference, is held between the teachers of the Basic School and the pre-school, the school psychologist, the school doctor, the school nurse and the administrative staff (head-master or director of studies), together with the parents of certain children if they wish to attend. This conference plans, for example, the necessary supportive measures for children who have shown themselves to have some kind of educational difficulty, e.g., assignment to a "familiarization" clinic, or some form of co-ordinated special teaching in an ordinary class. All proposals of this kind are discussed with the parents.

During the academic year, a pupil welfare conference is held at least once a month. The effect of the measures taken is assessed, and new measures proposed as necessary. In that the pupil welfare conference, and not simply the teacher, the parents, and the head-master, discuss the pupils' educational difficulties, the pupils are ensured an assessment alike by educational, medical, psychological and social experts; at the same time, the parents have a decisive influence. In this way, the pupils also receive individually structured help. A decision on the measures proposed is made formally by the head-master, after the matter has been discussed at the pupil welfare conference.

The pupil welfare conference deals with problems relating to pupils throughout their time at the Basic School. The number of persons taking part will depend on the questions discussed, and the particular groups of pupils dealt with. Normally, those taking part will be the head-master/director of studies, the pupils' class teacher, the school psychologist, the social worker, the school nurse and the school doctor, plus in some cases pupils and parents. (Stenholm, 1975).

2.3 Pre-school services. Four pre-school consultants for the (wholly or partially) blind (two nurses and two kindergarten teachers) co-operate with all the ophthalmological departments at the regional hospitals, with opticians, and with child care centres through the country.

Apart from the period around birth (preventive maternity and child care), all children are given the opportunity for a medical check-up at the age of four. By cooperation on infants suffering from visual defects, they then establish contact with the family and offer advice, information, and service; this offer is usually positively received, and the work of the consultant consists in guiding the parents' own work with the child, instruction on how to treat the child, help in finding toys and material to occupy the child, and advice on further medical contacts, and placing in the kindergarten and subsequently in school.

> The cooperation with parents started in the early years is later taken up by the school. Every year, a Parents' Week is organized at the special school receiving blind beginners. (National Swedish Board of Education, 1973).

This is an example of the pre-school services offered in Sweden. Similar developmental services are offered to all children and their families. There are medical and welfare services for pre-school children.

> Special teaching is always concerned with individual pupils. It tries, by means of special measures to support the pupil's school-work, to overcome his or her individual difficulties, and make it possible even for the severely handicapped to attend ordinary schools, so that they will later be able to assume their places as equal members of the community. Only in recent years has the school begun to develop other types of supportive measure, designed, for example, to prevent the occurrence of difficulties, by means of environmental improvements. The greatest effort of this type made to date is the expansion of the pre-school, and the early stimulation thus given to children from less favourable environments. Local authorities are now required to provide for children judged to be in need of special stimulation, and to arrange places for them in pre-schools from the age of four or even three; otherwise the formal right to enter a pre-school is acquired only at the age of six. (Compulsory schooling starts the year in which the child reaches the age of seven.) In many areas, however, even the majority of five-year-olds can attend pre-school if the parents wish. (Stenholm, 1975).
>
> 2.4 Integrated development services. It is considered that teachers providing special teaching need to maintain contact, more than other staff, with the pupils' homes, with the organization for the mental care of children and young people, and with other institutions caring for the pupils or members of their families. The teaching duties of those working with special teaching are thus less than for other teachers at the corresponding level. A teacher in an ordinary class, for instance, is required to teach 30 hours a week in Grades 1 - 6, while a special teacher has only 26 hours.

> The integration of different kinds of special teaching in the Basic School and gymnasium-level school makes considerable demands on the actual physical planning of premises. Schools must be equipped with special arrangements so that pupils with orthopedic handicaps, the blind, the deaf, and those with other physical handicaps, and those with various types of intellectual handicap, can all use the premises with minimum difficulty. They must be able to take part in the work of the school, and in activities during breaks and free hours. At the same time they must be able to obtain such rest, special treatment and relaxation as their handicap may demand during the school day. A special state grant is available for improvements to older schools that receive pupils with handicaps necessitating special installations on the premises. In new schools, it is assumed that such provisions will have been made from the beginning.
>
> More important than the equipment of school premises for use by handicapped pupils is the planning of these premises in a way that will prevent the occurrence of such educational difficulties as necessitate any extraordinary provisions. Only now are people becoming generally aware of the importance of the school environment for the ability of pupils to adjust to their work and take a pleasure in it. It is impossible as yet to say what consequences differently planned schools and a more freely structured school day can have for teaching as a whole. But great hopes are set on the school becoming a more outward-going community institution than it has traditionally been.
>
> Other measures of a preventive nature include leisure activities during free periods and long breaks, afternoon activities for the younger schoolchildren at free-time centres and neighborhood recreation centres, and support to youth clubs, etc. This entire development is based on a view of the individual as a whole within the community, and presupposes extended cooperation between the school, the local recreation committee, and the social services administration. It also presupposes a more self-evident and relaxed collaboration between the school and the home than we have so far succeeded in achieving, for the most part, in Sweden. (Stenholm, 1975).

2.5 Free developmental services. In Sweden, Elementary and Secondary education are free. Social welfare services are highly developed and free; the same is true for medical services. Education, health and welfare are free public services.

Remarks: In Sweden a strong movement toward social integration was observed; the school system is part of this trend. Integration is articulated in education as the equality of opportunity for learning experiences. Special education, even if integration is the goal, follows a student-centered integration pattern. The special education model of equality of opportunity does not refer to an "instructional system" model but more to a Pyramid model like Reynolds's (1971) model. There is a strong involvement in the relation between schools and community for educational purposes. Finally access to developmental services is facilitated by the free provision by the State.

3- Functional integration

The structure of public services in Sweden can be one that facilitates to a certain extent the functional integration of developmental education. The wide jurisdiction of community Council (education, health, welfare) at the local level can facilitate cooperative interventions. From interviews with several agents in the local community councils, it appears that cooperation does exist to a greater extent than isolation between and within different agencies of public services.

3.1 Intrasystem integration. The special educational model followed in Sweden is based on the ordinary school as the milieu of intervention. Therefore, it was possible to find cohesiveness between the different agents in the school in terms of their roles and actions toward children. There are however, difficulties in terms of role perceptions in many cases due to the lack of knowledge of regular class teachers of the specificity of certain special education intervention. Nevertheless, there is a tendency toward in-service training for all teachers in order to change these perceptions and facilitate functional integration of intervention.

> A great deal of effort is devoted to pupil welfare in the comprehensive school. One of the fundamental principles of pupil welfare is that it must include all the pupils in a school. It is designed wherever possible to prevent individual pupils and groups of pupils encountering difficulties in school. All members of the individual school should be jointly responsible in this connection. (NSBE, 1973).

3.2 Intersystem integration. The structure of public services jurisdiction and governance as indicated in point 3, does facilitate functional intersystem integration. Sweden, with its widely organized public services, does suffer from a lack of specialists that sometimes generate difficulties in attempts to respond to demands.

4- Openness to community

It was not possible, in the survey made in Sweden, to study carefully the relation of the school with the community. Yet, from previous quotations, it appears that the openness of the educational system to the community is a very important feature of that system. Educational interventions are very much related to community affairs. In fact, the community is often the source or center of action for development of students. In general the schools in Sweden follow closely the social evolution and are related to local realities.

4.1 Integration with community. As has been indicated, one of the goals of the Swedish educational system is to promote the development of competent and responsible members of society. This goal is articulated in the administrative structure of the educational system. The local authority of schools is in the hands of community municipal councils that have responsibilities in all fields of public services. These councils do relate education affairs to other social priorities. At another level, strong relations with parents is built into the system.

> Parents' meetings, class meetings and open days provide parents with an opportunity of experiencing the everyday life of school, increasing their familiarity with the school system, asking questions and obtaining answers.
>
> Comprehensive schools in Sweden cooperate with the parents' associations through the medium of the National Federation of Parent-Teacher Associations, which is active at central, regional and local levels and receive public financial support.
>
> The responsibility of parents and guardians for the upbringing and care of their children is affirmed by the comprehensive school curriculum, (Lgr 69), which also emphasizes that the individual pupil constitutes the focal point of school activities. (NSBE, 1973).

4.2 Permanent educational services. It has taken 20 years to develop educational facilities for teenagers. This means that most Swedish people and by far the greater proportion of gainfully employed have much less educational attainment than the young people who are now joining the labor force. In order to keep this generation gap from widening and to help older persons compete for jobs on more equal terms, the system of adult education is being expanded. It has been cast into new molds alongside the large scale programs that the educational associations have long operated on a voluntary basis. The municipalities have been made responsible for ensuring that any adults who so desire are enabled to take courses, mostly part-time, at the upper-basic and secondary levels. (Swedish Institute, 1974).

5- Decentralized integrated long-range planning

The Swedish planning process is described on the basis of the elementary school reform by Serge Richard (1971) as being established on four stages:

- Research (Pedagogical)
- Experimentation in selected areas
- Commission work
- Public debate
- Discussion and decision by the Government

> Pourquoi cette création de l'école de base? C'est l'application concrète que les Suédois ont voulu faire de la philosophie égalitariste qui est la leur, pour l'école comme pour d'autres institutions.
>
> A l'aube de notre période 1940-1970, les trois préalables d'une réforme sont donc en place: le besoin de la collectivité (demande d'éducation, et d'une éducation démocratisée), la volonté politique (la démocratie socialiste se veut égalitariste) et le projet (l'école unifiée jusqu'a 16 ans). Il n'y a plus qu'à passer à la première véritable phase (celle de la préparation) de toute réforme suédoise. C'est-à-dire d'une réforme "à froid", élaborée sans hâte, et dont les étapes sont traditionnellement les suivantes:
>
> - Période de recherche (recherche pédagogique, en l'occurence);
> - Expérimentation dans des secteurs-pilotes;
> - Travail de commission;
> - Débat dans l'opinion;
> - Discussion et décision par le Parlement.
>
> (Richard, 1971).

Decentralization is another factor, since the structure of governance tends toward decentralization and the planning process follows the same pattern.

5.1 Local long-range planning. Planning is one of the functions of the local municipal education authorities since they control their own development. According to Richard (1971) the pattern of long-range planning is a fundamental characteristic of the Swedish system.

5.2 Agents' participation. Even if the school decision-making and planning tend to be decentralized there is, according to the interviews with teachers, a need for greater participation of parents and teachers in continuous decision-making. One element which does facilitate participation is the level of deformalization of hierarchical relationship in the Swedish system. The egalitarian goal of that society facilitates the participation of all on the basis of the collective nature of the delivery system and simplified relationships.

5.3 Securing control. Part of the school reform in Sweden is the depressurizing of the educational system. Control in the schools is in the hands of part-time teachers and part-time administrators that are closer to teaching realities; furthermore, school inspectors are not evaluators but facilitators or a source of assistance to schools for resources support. The pressure for academic achievement is being replaced by the goal of self-realization; therefore, competition is lowered in the schools and between the schools. These factors affect greatly and positively the security of teachers in their work.

5.4 Funding. Sweden's egalitarian ideology is reflected in the financing of education. The state tends to assume equality of services in the country but leaves the greater part of the financial burden of education to local authorities. Therefore, municipalities through their taxation power finance education, with the exception of teachers' salaries which are paid by the state. Special education is financed on the basis of a number of hours per students (0.3 hours per week per student); this is a non-categorical financing on the basis of a global special education program. It was not possible to determine to what extent program budgeting was developed but the non-categorical budgeting and financing of special education can be a possible application of that process.

Comments. It appears from this analysis that Sweden is very close to the premises of the special education model. In fact special education in Sweden is very much integrated with the regular school system. However, several areas remain to be developed in order to achieve complete integration. There should be some work done on curriculum design and organizational growth process. The "instructional system" model could be more officially implemented to bring student evaluation to a process based on Aptitude Treatment Interaction. Finally, all elements of the Swedish model as analysed according to the inputs determination cluster could be articulated and integrated if a global framework were applied such as the proposed model of this thesis.

HOLLAND

The second educational system that will be analysed is the Dutch system. The research conducted in Holland did not yield as much data as was expected. The Dutch educational system is in the midst of a profound reorganization and the analysis of the available material was of value. Some of the elements of Table 9 are not reviewed due to the lack of information brought back from the field investigation. The analysis will again be made on the basis of quotations from official documents and field observations.

The structure of the educational system in Holland, as shown in Figure 27, is based on an early organizational differentiation of programs. Differentiated program avenues has been a constant factor in the Dutch educational system. Special education therefore appears as one separate unit of the system with sixteen types of special schools. The entire special education delivery system in Holland relies on separated special schools. Table 12 gives the list of the sixteen types of special schools.

The data collection in Holland consisted exclusively of visits and meetings in special schools. The time spent in Holland and the plans set up by the Ministry of Education and Science for the visit, restricted any other type of meetings with other sources of information.

Another important feature of the Dutch educational system is the difference in the dependence of schools. Public and private schools are financed totally and according to the same criteria by the State. In fact, there are three general types of school organization: public schools, private confessional schools, and private non-confessional schools. The analysis that follows uses two types of information: the actual situation as described in official texts and the proposed changes made by a commission that had the responsibility to elaborate the framework of the Dutch educational system for the year 2000. Figure 28 shows the nature of the educational structure in Holland as proposed by this commission. In comparison with Figure 27, it appears that the Dutch system will be oriented toward an individual differentiation approach, as is the case in the Swedish model, rather than the early organizational

Figure 27

The Structure of Teaching
in the Netherlands

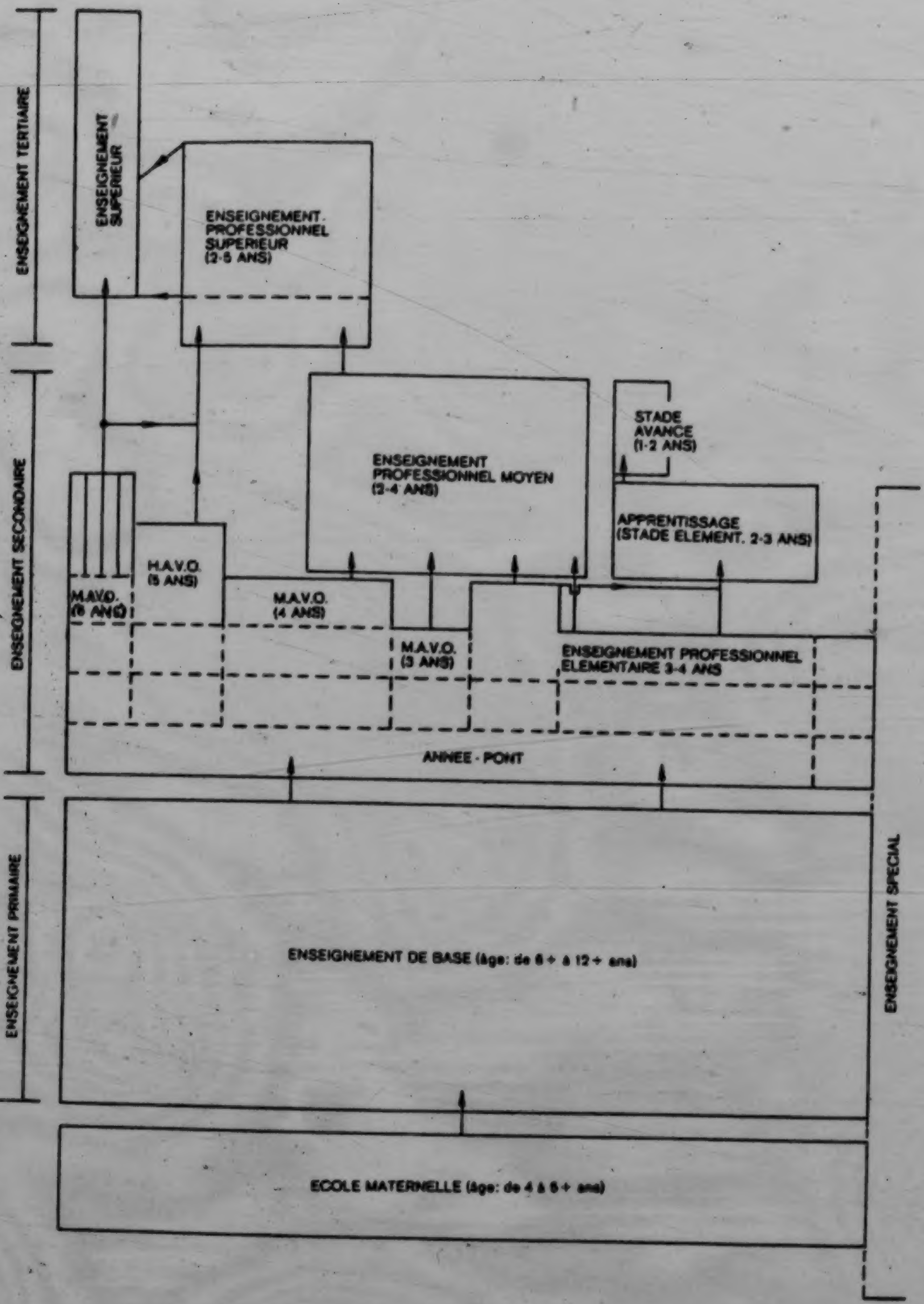

ENSEIGNEMENT TERTIAIRE
ENSEIGNEMENT SUPERIEUR
ENSEIGNEMENT PROFESSIONNEL SUPERIEUR (2-5 ANS)
ENSEIGNEMENT SECONDAIRE
ENSEIGNEMENT PROFESSIONNEL MOYEN (2-4 ANS)
STADE AVANCE (1-2 ANS)
APPRENTISSAGE (STADE ELEMENT. 2-3 ANS)
M.A.V.O. (6 ANS)
H.A.V.O. (5 ANS)
M.A.V.O. (4 ANS)
M.A.V.O. (3 ANS)
ENSEIGNEMENT PROFESSIONNEL ELEMENTAIRE 3-4 ANS
ANNEE - PONT
ENSEIGNEMENT PRIMAIRE
ENSEIGNEMENT DE BASE (âge: de 6 + à 12 + ans)
ENSEIGNEMENT SPECIAL
ECOLE MATERNELLE (âge: de 4 à 6 + ans)

Table 12

Types of Schools for Exceptional Children in Holland

---

1. School for deaf children
2. Schools for children who are hard of hearing
3. Schools for children with serious speech impediments who do not belong in categories 1 or 2
4. Schools for blind children
5. Schools for children with impaired sight
6. Schools for physically handicapped
7. Recuperation centres for children suffering from chronic diseases
8. Schools for delicate children
9. Schools for children suffering from fits
10. Schools for mentally retarded children
11. Schools for imbeciles
12. Schools attached to homes as referred to in Article 7 of the Act of 27 April 1948 (Bulletin of Acts, Orders and Decrees 96) and intended for children with subnormal intelligence
13. Schools for maladjusted children
14. Schools attached to homes as referred to in Article 5 of the Children Act
15. Schools attached to pedagogical homes
16. Schools for children with complex educational and psychological problems

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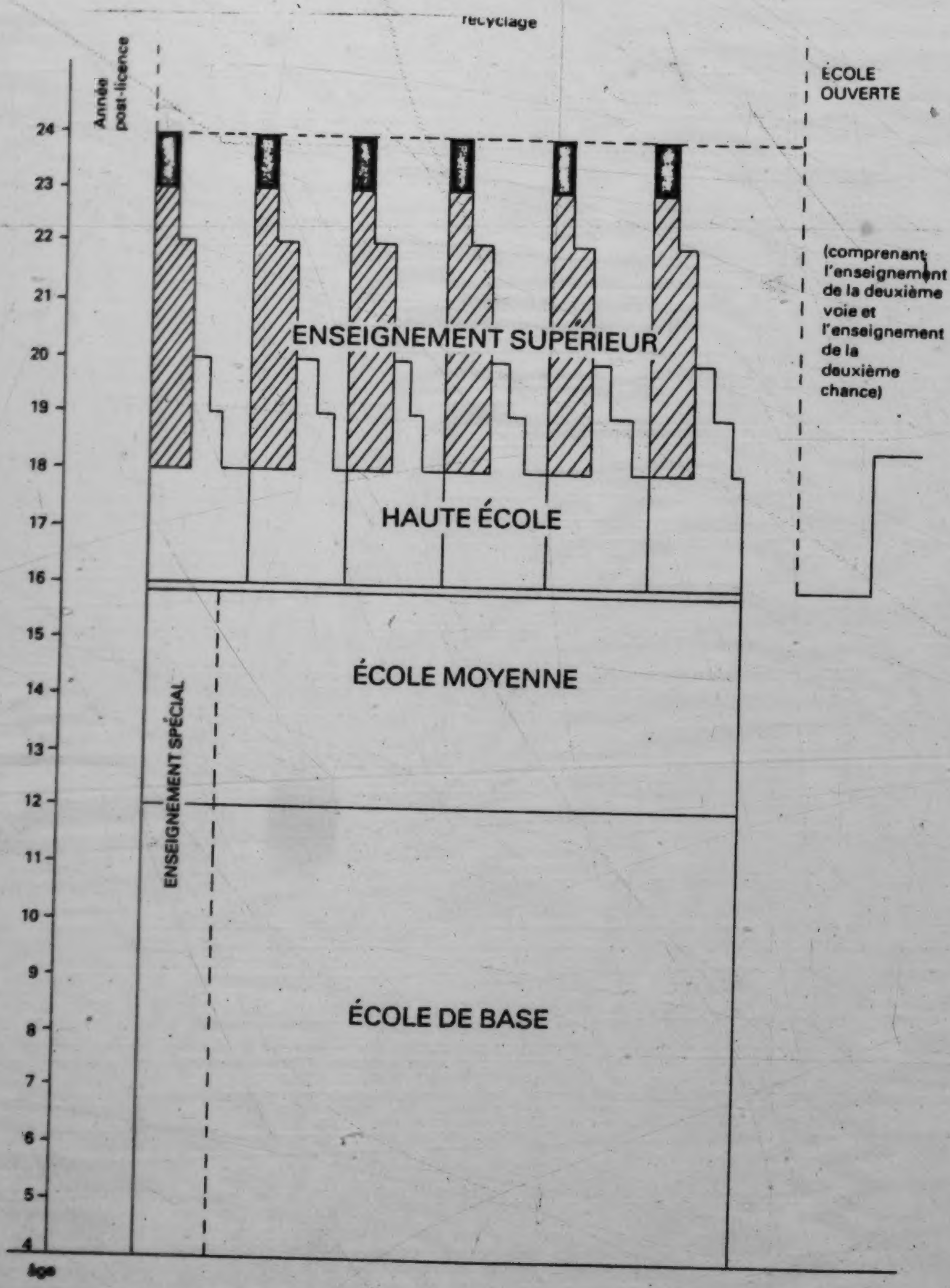
Figure 28

The New Structure of Teaching in the Netherlands


recyclage
Année post-licence
ÉCOLE OUVERTE
(comprenant l'enseignement de la deuxième voie et l'enseignement de la deuxième chance)
ENSEIGNEMENT SUPÉRIEUR
HAUTE ÉCOLE
ÉCOLE MOYENNE
ENSEIGNEMENT SPÉCIAL
ÉCOLE DE BASE
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
âge

differentiation.

1- Self-realization for all

The Dutch educational system is based on the aim of acquisition of knowledge and professional competence.

> D'une manière générale, l'enseignement primaire vise à faire acquérir à l'enfant diverses connaissances et capacités fondamentales, jugées nécessaires ou souhaitables pour son développement ultérieur.
>
> L'enseignement primaire traditionnel tend à offrir aux élèves un ensemble relativement complet de connaissances et de capacités, ensemble considéré à tout le moins comme nécessaire pour l'avenir d'un grand groupe d'enfants. Certes, le programme des années d'études successives peut varier d'une école à l'autre. Il est cependant toujours caractérisé par le fait qu'on exige de l'élève un minimum de connaissances: chaque année, il doit atteindre un niveau déterminé, notamment dans sa manière de lire, d'écrire et de calculer, pour pouvoir passer dans la classe supérieure. D'où une sélection sévère: de nombreux élèves doivent redoubler leur classe. Les chiffres sont d'ailleurs éloquents: deux tiers seulement des élèves entrés en première année de l'école primaire se retrouvent sur les bancs d'un établissement d'enseignement postprimaire six ans plus tard; aux autres, il faut un ou deux ans de plus.
>
> L'enseignement primaire moderne, ou l'enseignement de base, doit, lui, servir de fondement à l'enseignement postprimaire. Pour aucun enfant, il ne doit constituer le point final de la formation scolaire. Ce n'est pas la matière enseignée mais l'enfant qui doit être au centre des préoccupations. Il faut dès lors que l'enseignement de base tienne compte des aptitudes individuelles de chaque élève. Pour cela, une nouvelle organisation est nécessaire: il faut mettre fin aux redoublements en renonçant à imposer tel programme fixe pour telle année d'études; il faut aussi abandonner le système des classes et réduire au strict minimum la subdivision de l'enseignement en matières. (Min. Ens. et Sciences, Pays Bas, 1976).

1.1 Individualized instruction. On the basis of the reform proposed by the three members of the commission, one of the basic elements to be generated in Dutch education is the individualization of instruction and the development of the person.

> Les trois signataires énumèrent quelques éléments du système actuel qui militent en faveur de la nouvelle école de base:
>
> - Le passage de l'enseignement préprimaire à l'enseignement primaire ordinaire n'est déterminé que par l'âge de l'enfant, ce qui entrava le processus de développement continu.
> - Le système des programmes déterminés correspondant à des années d'études déterminées ne peut tenir compte des différences individuelles quant aux possibilités de développement.
> - La formation dans le domaine des sentiments, de l'expression, de la création et de la maîtrise des "aptitudes sociales" fait figure de parent pauvre.
> - La nette subdivision en matières ne cadre pas avec le mode de pensée des enfants de l'école préprimaire ou de l'école primaire.
> - L'école est insuffisamment adaptée au langage, au mode de comportement et au mode de vie des élèves.
> - Les stagnations dans le processus de développement ne reçoivent pas toute l'attention voulue. Il arrive que les enfants doient dirigés trop vite vers l'enseignement spécial.
> - L'étude obligatoire d'une langue étrangère pour tous les élèves.
> - L'épanouissement de la personnalité de chacun en un processus ininterrompu de formation, de développement et d'apprentissage.
> - La création de chances égales.
> - L'octroi d'une attention suffisante à l'identité de l'enfant dans les phases successives de développement.
> - Le dépistage en temps opportun des stagnations dans le processus de développement et d'apprentissage, la recherche des causes de ces stagnations et l'octroi d'une aide adéquate aux élèves individuels.
> - La création de situations d'enseignement et d'apprentissage adaptées à la nature des élèves.
> - Au niveau de l'école moyenne, les élèves suivent ensemble un enseignement général et un enseignement professionnel, au sein d'un groupe d'âge constitué indépendamment des dispositions naturelles, du milieu d'origine et des performances scolaires. Cela ne signifie pas que tous les éléments du programme soient enseignés à un niveau égal à tous les élèves d'un tel groupe. Les rédacteurs de la note se prononcent clairement contre une école unitaire:

> "Les faibles échoueraient, les forts seraient freinés et la médiocrité prendrait rang de norme." Abattre les cloisons du système catégoriel actuel, ce n'est en aucun cas promouvoir l'uniformité ni le nivellement: "Au contraire, une nouvelle forme d'enseignement doit apparaître, qui permette à chaque élève d'épanouir sa personnalité selon ses dispositions, ses intérêts et ses capacités.
>
> - Le choix d'une formation et d'une profession est reporté à plus tard.
> - L'objectif de l'école de base - offrir des chances "égales", c'est-à-dire optimales d'épanouissement - est maintenu.
> - La teneur de l'enseignement et de la formation destinés aux élèves de 12 à 16 ans est élargie.
> - Les élèves se voient placés dans des situations d'enseignement et d'apprentissage favorisant l'épanouissement individuel et la conscientisation sociale. (Ministère de l'Enseignement et des Sciences des Pays Bas, 1976).

1.2 Curriculum design. In the operational system the curriculum is based on the acquisition of knowledge; therefore, it focuses more on the organization of learning than on the process of individual development. As shown in the last section, each year of the program has its minimum level of learning goals. In special education the same pattern appears to be applied. Also separate schools are often justified on the basis of curriculum integrity or the impossibility of providing regular learning milieu with differentialized learners to the extent of satisfying individual needs.

1.3 Organizational growth. It was not possible to study in detail this element of the Dutch educational system. The actual preoccupations of this nature are more related to participation of the members of the system to decision-making as will be seen in 5.2.

1.4 Definition of exceptionality. As shown in Table 12, in Holland there is a special school, special education approach. Therefore, as indicated in Chapter II of this study, it is a "patient" typology of exceptionality that prevails in the system.

> L'enseignement spécial est destiné aux enfants qui, pour l'un ou l'autre motif, ne sont pas en mesure de suivre l'enseignement ordinaire.
>
> Ces enfants appartiennent à deux catégories différentes:
>
> 1. Les enfants qui nécessitent une attention spéciale de la part des éducateurs soit parce qu'ils souffrent d'un handicap sensoriel, physique ou mental, soit en raison de leur comportement. Il s'agit notamment d'enfants atteints de surdité totale ou partielle, souffrant de troubles de la parole, atteints de cécité totale ou partielle, placés en maison de convalescence pour longues maladies, physiquement ou mentalement handicapés, difficiles à élever et à éduquer, maladifs, épileptiques, placés dans des institutions pour délinquants ou dans des centres pédologiques.
> 2. Les enfants qui ne peuvent suivre l'enseignement ordinaire en raison de leur situation sociale particulière: leurs parents mènent une existence itinérante. Ce sont les enfants de bateliers, d'habitants de roulottes et de forains.
>
> La première de ces catégories est de loin la plus vaste; les enfants mentalement handicapés en constituent le groupe le plus nombreux.
>
> Les enfants relevant de cette catégorie peuvent être admis à partir de l'âge de trois ans dans une des écoles spécialement créées à leur intention. Ils doivent quitter l'école à l'âge de dix-sept ans ou, au plus tard, si l'inspecteur compétent leur accorde une prolongation, à l'âge de vingt ans.
>
> Toutes les écoles de cette catégorie comportent une section centrale réservée à l'enseignement primaire et ouverte aux enfants âgés de six ans au moins.
>
> Elles peuvent comprendre en outre une section spéciale pour enfants très jeunes (de trois à sept ans) et une section assurant une enseignement postprimaire.
>
> Diverses combinaisons sont possibles: par exemple, une école pour enfants aveugles peut posséder une section pour enfants atteints de surdité partielle.
>
> L'enseignement spécial comprend l'ensemble d'équipements pédagogiques destinés aux enfants incapables d'aller à l'école de base ou à l'école moyenne parce qu'ils sont handicapés mentalement, physiquement ou socialement.
>
> Le Ministre et les Secrétaires d'Etat plaident pour que l'école de base et l'école moyenne soient aménagés de telle sorte qu'il faille diriger moins d'équipement d'en fants vers l'enseignement spécial. Un ensemble souple de

mesures et d'équipement d'enseignement spécial doit contribuer à ce que les enfants en difficulté ne perdent que dans des cas extrêmes le contact avec l'enseignement ordinaire.

Le nombre de types d'écoles - actuellement une vingtaine - doit être très sensiblement réduit. La distinction entre ces types repose en majeure partie sur des critères médicaux. Il n'est pas tenu suffisamment compte des besoins de l'enfant en matière pédagogique.

Des critères clairs devront être formulés pour l'orientation et l'admission des enfants voués à cet enseignement spécial. Les trois signataires n'estiment pas souhaitable de séparer, au sein de l'enseignement spécial, l'école de base et l'école moyenne. Ils songent à quatre sortes d'enseignement spécial:

- l'enseignement axé sur le mouvement, s'adressant aux enfants qui, du fait de l'insuffisance de leurs facultés mentales, occuperont dans la vie professionnelle des fonctions où les performances motrices et manuelles l'emporteront sur les performances intellectuelles;
- l'enseignement orthopédagogique, visant à ramener les intéressés au niveau de l'enseignement de base;
- l'enseignement de compensation, s'attachant aux troubles fonctionnels de nature organique;
- l'enseignement thérapeutique, se consacrant aux troubles psychiques.

Ils pensent qu'il faut, à long terms, tendre vers une intégration de l'enseignement ordinaire et de l'enseignement spécial, surtout au niveau pédagogique.

Par ailleurs, ils entendent prendre les mesures requises pour l'élaboration des plans d'études, la formation et le recyclage des instituteurs, la construction de bâtiments scolaires et les moyens didactiques. Il faudra en outre renforcer le personnel des services d'encadrement scolaire s'occupant de l'enseignement spécial.

Les maîtres de l'enseignement spécial doivent suivre, outre la formation requise pour l'enseignement de base, une formation spécialisée.

De surcroît, des formations préparant à des soins très spécialisés doivent être organisées par de nouveaux instituts nationaux.

A bref délai, il faudra s'opposer à l'augmentation des types d'écoles. On encouragera les "associations" de deux ou plusieurs types d'écoles. On encouragera aussi les intégrations, si elles se défendent du point de vue pédagogique. (MESPB, 1976).

1.5 Competence-based approach. A "patient" approach to exceptionality is more related, as a rule, to the deficiency in the person than in his competence. It was possible to verify that in Holland a very good knowledge of deficiency-based intervention has been achieved, although it was not possible to see a generally competence-based approach in their school system, even if, as a constant, there are many attempts to develop competent individuals in the schools.

2- Equality of opportunity

The reform of the Dutch educational system implies the development of pre-elementary and elementary education based on individual differences and on the socio-cultural context of the school.

> L'enseignement doit tendre à fournir à l'élève - quels que soient son origine, son milieu de vie et son sexe - une chance optimale de déceler et d'épanouir ses aptitudes. Chaque garçon, comme chaque fille, a le droit de faire des études, et il faut lui offrir les mêmes possibilités qu'à tous les autres jeunes gens ayant des capacités égales. Les intérêts de l'élève coincident ici parfaitement avec ceux de la société.
>
> Les enseignements préprimaire et primaire doivent être aménagés de manière à pouvoir mieux s'adapter au niveau de développement et au contexte socio-culturel de chaque élève. A cette fin, il faut notamment supprimer la frontière entre enseignement préprimaire et enseignement primaire, abandonner le système de la correspondance de tel programme d'études à telle année d'études et mettre en oeuvre des méthodes didactiques plus axées sur les possibilités et les expériences individuelles.
>
> Les rédacteurs de la note signalent le danger de voir croître l'inégalité sociale entre personnes à talents ou à niveaux de formation différents: "Toute modification du système éducatif n'aboutissant qu'à renforcer l'égalité des chances sur la voie d'une nouvelle inégalité sociale résout certes l'actuelle inégalité des relations sociales, mais risque d'engendrer de nouvelles oppositions sociales, peut-être plus aiguës."

> C'est pourquoi ils sont d'avis qu'une politique éducative visant à plus d'égalité ne peut simplement offrir aux divers individus et groupements des chances égales de participation et l'enseignement: "Pareille politique doit en outre améliorer les possibilités d'épanouissement d'individus différemment doués et surtout renforcer le sens des droits et des devoirs de tous, quels que soient leurs dons."
>
> Ils précisent dans ce contexte que la politique éducative ne peut à elle seule empêcher l'apparition d'une nouvelle inégalité sociale. Beaucoup dépend des revenus, de la puissance et du prestige que la société attache à certaines performances scolaires. (Ministère Enseignement et des Sciences, Pays Bas, 1976).

2.1 Instructional system. With the present organization of special education in Holland, it is not possible to think in terms of instructional systems. Nevertheless, as discussed in 1.4 there are provisions to integrate some of the special education interventions within the regular schools.

2.2 Evaluation of children. Again this element being related to 2.1 it is not possible to think in terms of A.T.I. evaluation. The actual situation brings a deficiency identification process rather than pedagogical practices based on a competence approach.

2.3 Pre-school services. No information justifying the analysis of this item was obtained.

2.4 Integrated development services. No information justifying the analysis of this item was available.

2.5 Free developmental services. The only information gathered for educational services was as follows:

> Les frais de scolarité et les droits de participation aux cours représentent les contributions par lesquelles les parents (ou les étudiants) paient les services rendus par l'enseignement. C'est là un nouveau signe de la responsabilité des parents quant à l'éducation de leurs enfants.
>
> Dans l'école maternelle, les parents paient un montant fixe par enfant et par année. Toutefois, si ce paiement leur impose une charge financière excessive, ils peuvent en être exemptés partiellement ou complètement.
>
> Aucun droit n'est dû pour les enfants en âge scolaire. Les parents sont donc exemptés du paiement de frais de scolarité pour les enfants qui suivent l'enseignement primaire et les deux premières années de l'enseignement postprimaire.
>
> Pour les années d'études suivantes, le montant des frais de scolarité est établi, à l'aide d'un barème spécial, par l'inspecteur des contributions, qui se base pour ce faire sur la somme globale dont les parents sont redevables au titre des impôts sur le revenu et sur la fortune; il est également tenu compte du nombre d'enfants en âge scolaire appartenant à la même famille. Les frais de scolarité ne peuvent excéder un certain plafond.
>
> Pour les enfants fréquentant une école publique, l'inspecteur des contributions veille à la perception des frais de scolarité. Quant aux écoles privées, le processus est le même à condition que la direction en fasse la demande, ce qui est de règle.
>
> Pour fréquenter une université ou une grande école, il faut payer des droits de participation aux cours. (MAEPB, 1971).

3- Functional integration

Being separated in special schools, special education in Holland is not functionally integrated as proposed in the model in Chapter IV. It is structurally integrated but operates as a separated unit in the educational system. As discussed in part 1.4, there is a tendency, as proposed by the commission, to bring some special education into the regular schools.

3.1 Intrasystem integration. At this level the commission proposed that students participate in planning their learning experiences.

> L'école ne saurait être - par même au niveau administratif - un système refermé sur lui-même: "L'intérêt de la communauté nationale, de même que, surtout dans l'enseignement privé, celui des communautés partielles, va au-delà de l'engagement direct de ceux qui travaillent et qui vivent à l'école".
>
> Les rédacteurs de la note plaident pour une structure efficace des communications au sein de l'école. L'influence de l'élève sur le processus d'enseignement et d'apprentissage et sa participation à l'aménagement de l'enseignement doivent constituer des éléments tout naturels du plan scolaire intégral (qui renferme tous les aspects de l'enseignement scolaire) et de l'organisation scolaire. Deux facteurs jouent ici un rôle: l'âge des élèves et la nature du processus d'enseignement et d'apprentissage.
>
> L'apport des élèves à l'école de base et dans les premières années de l'école moyenne portera surtout sur le choix et sur la teneur de nombreuses activités créatives et récréatrices.
>
> Aux élèves plus âgés devra être donnée une plus grande latitude de choix quant à la teneur de l'enseignement et à ses méthodes. Ces élèves devront avoir leur mot à dire en ce qui concerne l'organisation de l'école et la nomination du personnel, devront avoir la faculté d'assumer une responsabilité propre pour la mise sur pied de nombre d'activités organisées au sein de l'école à leur intention.
>
> La note se prononce pour la mise en place d'un conseil des élèves dans chaque école. Ce conseil devra être entendu pour les décisions concernant l'encadrement des élèves, les équipements matériels, la nomination du personnel et le choix des moyens didactiques. (NESPB, 1976).

To this statement should be added the new organization of the participatory process planning as an aid to the decision-making of section 5.2 It was not possible to gather information on intra-system cohesiveness in the schools to the extent required for a comprehensive overview of this element.

3.2 Intrasystem integration. Holland, on this factor, follows the same pattern as Sweden, namely, municipal responsibility for nearly all public services. It follows a certain integration of services. Health services are also under public and private jurisdiction and financed by the State and municipal governments. The difference between Holland and Sweden is due to the existence of private institutions (schools - health services - social services) that are not directly governed by the municipalities. Nevertheless, inspectors from the government are employed to provide coordination between these services.

4- Openness to community

The Dutch school must be open to the interest of the nation:

> L'école ne saurait être - pas même au niveau administratif - un système refermé sur lui-même: "L'intérêt de la communauté nationale, de même que, surtout dans l'enseignement privé, celui des communautés partielles, va au-delà de l'engagement direct de ceux qui travaillent et qui vivent à l'école". (MESPB, 1976).

4.1 Integration with community. The reform proposes closer interaction between the school and the family:

> Si l'on veut répartir les chances d'épanouissement social, on doit, à long terme, rénover l'enseignement en profondeur. Pour ce faire, on doit, premièrement, rapprocher l'école et le voisinage, l'école et les parents, bref le milieu scolaire et le milieu familial. L'enseignement, la formation et l'éducation doivent se renforcer mutuellement dans toute la mesure possible. (MESPB, 1976).

4.2 Permanent education services. The principle of access to educational services throughout the life of the person is part of the Dutch reform:

> L'école ouverte est le dernier élément de la nouvelle structure éducative. Elle coordonne toutes les possibilités

> de formation succédant à la première voie d'enseignement; elle en assure d'ailleurs certaines.
>
> Chacun doit pouvoir étudier toute sa vie durant, doit pouvoir se réorienter par l'exercice, l'étude, la discussion et la réflexion. Il faut donc des possibilités accessibles à tous, et qui, s'échelonnant dans le temps et dans l'espace, répondent aux situations et aux besoins que connaissent dans leur vie et leur travail tous les adultes des Pays-Bas. L'école ouverte doit assurer l'organisation systématique de ces possibilités. Une des possibilités de formation offertes à la fin de la scolarité obligatoire sera l'"enseignement de la deuxième voie". Celui-ci devra se greffer aussi étroitement que possible sur la vie professionnelle des participants. (MESPB, 1976).

5- Decentralized integrated long-range planning

As expressed by the members of the commission, planning is a long-range prescription for development. The actual reform in the Dutch educational system is aimed at the organization for the year 2000. The members of the commission plan to consult many interested groups in the planning process:

> Le Ministre et les Secrétaires d'Etat insistent sur le fait que la mise en oeuvre des idées qu'ils avancent n'a encore fait l'objet d'aucune décision définitive: "La note ne prétend être qu'une contribution à une discussion relative à la transformation du système d'enseignement dans les 20 à 25 années à venir".
>
> Les projets pourront être sensiblement modifiés après que les nombreux intéressés se seront prononcés. Ils devront prouver leur valeur lors de certaines expériences. De plus, les conséquences financières - pour le budget, pour l'économie nationale - devront être étudiées très attentivement; il faudra peser les possibilités, définir des priorités. Pour donner le moyen de se former à tous ceux qui ne l'ont pas en ce moment, on devra consentir de grands sacrifices.
>
> La mise en oeuvre de ces propositions dépendra de choix politiques ne relevant pas uniquement du Ministre de l'Enseignement et des Sciences. Aussi plusieurs organismes seront-ils priés de donner leur avis: le Conseil scientifique

> provisoire de la politique gouvernementale, le Conseil économique et social, le Conseil de l'enseignement, le Conseil de la formation extra-scolaire de la jeunesse, le Bureau central du plan, le Bureau de la planification socio-culturelle et le Bureau de la planification de l'enseignement, ce dernier en voie de création. Par ailleurs, les vastes concertations ministérielles se poursuivront. Il sera tenu compte des résultats de ces consultations et de ces concertations dans l'élaboration de la note définite. (MESPB, 1976).

5.1 Local long-range planning. No information was available on this aspect of planning.

5.2 Agents of participation. The Dutch reform specifies some modalities of participation of parents, students, and teachers in decision-making.

> Les lois régissant l'enseignement prévoient diverses institutions susceptibles d'influer sur les rapports entre l'école et les parents. Elles font une distinction à cet égard entre l'enseignement public et l'enseignement privé.
>
> En ce qui concerne l'enseignement public, la création d'une commission de parents est en principe obligatoire pour toutes les écoles maternelles, primaires et post-primaires; seuls les établissements d'enseignement post-primaire peuvent être dispensés de cette obligation. La commission de parents comprend à la fois les représentants des parents et ceux du personnel enseignant, ces derniers n'ayant que voix consultative.
>
> Une commune administrant plus d'une école peut instituer un conseil de parents ou un conseil scolaire. Au conseil de parents siègent les membres des commissions de parents des diverses écoles. Le conseil scolaire a une composition plus large que le conseil de parents.
>
> Ces différents organes ont un caractère consultatif; ils sont appelés à stimuler les activités scolaires, mais n'exercent pas de fonction administrative.
>
> Contrairement à ce qui se passe dans l'enseignement public, les directions des écoles privées ne sont pas obligées par la loi d'instituer des commissions de parents. La gestion de ces écoles peut être confiée à une fondation ou à une association (ou institution) dotée de la personnalité juridique (église, oeuvre de charité, congrégation, etc.)

Le besoin d'une commission de parents sera plus ou moins net d'après la nature et la composition de la direction de l'établissement. Il est, en effet, possible que les parents fassent déjà partie de l'association. Si la direction de l'école décide d'instituer une commission de parents, elle détermine aussi les compétences de celle-ci. Malgré l'absence de toute obligation légale, bon nombre d'écoles privées ont créé des commissions de parents.

Quant à la démocratisation interne, elle vise, elle, à conférer à toutes les personnes faisant partie d'une "communauté d'enseignement" certains droits leur permettant d'exercer quelque influence sur la marche des affaires au sein de cette communauté. Tant les élèves (des classes supérieures) que les professeurs et le personnel non enseignant insistent pour participer aux décisions sur les questions administratives, qui, à leurs yeux, concernent dans une mesure égale toutes les composantes de la communauté. La recherche de la démocratisation interne est une réaction - sensible surtout dans le monde étudiant - contre une administration autoritaire et hiérarchisée, qui ne se souciait guère, généralement, de concertation ou d'échange d'idées.

Par ailleurs, les rédacteurs de la note proposent que les enseignants soient représentés au sein de la direction de l'école et qu'il soit créé un conseil des professeurs. Ce conseil s'occupera des achats de matériel didactique dans les limites d'un budget déterminé, il établira des méthodes d'appréciation des progrès scolaires, il définira des méthodes didactiques. Le conseil des professeurs devra également être entendu pour les décisions concernant la nomination de personnel et l'aménagement du bâtiment scolaire.

Les trois signataires sont contre une autogestion entière exercée par les enseignants et par les élèves. Ils considèrent, en effet, qu'une telle solution ne tiendrait pas compte de la fonction sociale générale de l'école.

Ils estiment que les parents et les enseignants doivent être représentés au sein de la direction de l'école, mais aussi le personnel non enseignant, les élèves de plus de 18 ans et les membres de la communauté ou des communautés partielles que "dessert" l'enseignement. Concrètement, ils pensent à des directions scolaires se composant pour moitié de représentants de cette dernière catégorie et pour moitié de représentants des quatre autres catégories citées.

La note s'attache à trois formes de participation des parents. Il y a, tout d'abord, les activités que les parents déploient à l'école et qui n'ont pas de lien

> direct avec l'enseignement: les parents peuvent, par exemple, aider les enseignants et les élèves à aménager le bâtiment scolaire.
>
> La deuxième forme de participation comprend les activités de soutien direct à l'enseignement. On peut songer à des discussions entre parents et enfants, dans un cadre scolaire, sur les proglèmes du quartier.
>
> La troisième forme est la participation des parents à l'enseignement donné à leurs enfants. Ils collaborent aux leçons sous la responsabilité des enseignants.
>
> "Les fondements de la participation des parents sont posés dès l'enseignement préprimaire. C'est à ce niveau déjà qu'il doit être remédié à d'eventuels retards éducatifs dus au contexte social." (MESPB, 1976).

5.3 Securing control. Holland has a system of inspectors for the control process in the school system:

> L'enseignement public doit respecter les convictions religieuses de chacun.
>
> L'enseignement financé en tout ou en partie par le trésor public doit répondre à certaines conditions de qualité, qui ne peuvent cependant porter atteinte à la liberté dont jouit l'enseignement privé.
>
> La qualité de l'enseignement primaire de formation générale doit être également garantie dans les écoles publiques et dans les écoles privées financées entièrement par le trésor public, étant entendu que ces dernières doivent être libres de choisir leurs moyens didactiques et de désigner leurs instituteurs. (MAEPB, 1971)

It was not possible to observe whether the inspector in Holland has more a stimulating and facilitating role than a strict evaluation role. There is a very strong relationship between teachers, head-masters, and inspectors. In fact, the inspectors are members of the teachers' trade unions.

5.4 Funding. Funding is on a state-determined basis; rules are given for the financial norms to be applied in the schools.

Par "financement", on entend ici le remboursement intégral par l'Etat des frais entraînés par l'enseignement communal et privé, conformément aux règles énoncées par les lois régissant cette matière.

Peuvent être remboursés: les frais d'établissement (terrains et bâtiments), les loyers, les frais d'exploitation (entretien des bâtiments et de l'équipement, chauffage, nettoyage, administration, etc.) et les salaires du personnel (y compris les primes légales).

Les règlements ayant trait à l'école maternelle et à l'enseignement primaire présentent beaucoup d'analogie. Une école publique d'un de ces deux types ne peut être créée que par la commune, le cas échéant avec le concours d'une commune limitrophe; dans ces secteurs de l'enseignement, il n'existe pas d'écoles de l'Etat. Il incombe donc à chaque commune de veiller à ce qu'il y ait un nombre suffisant d'écoles publiques accessibles à tous les enfants, quelles que soient leurs croyances religieuses.

La création des écoles maternelles ou primaires privées est laissée à l'initiative des institutions ou associations intéressées, dotées de la personnalité juridique. Ces dernières doivent prouver, au moment où elles introduisent leur demande, que l'école qu'elles envisagent de créer sera fréquentée par un nombre d'enfants correspondant à tout le moins aux normes établies par la loi, normes qui varient selon le nombre d'habitants de la commune.

Si la demande satisfait aux conditions légales, la commune est tenue de prêter son concours, sur le plan financier, à l'établissement et à l'exploitation de l'école privée. La somme annuelle à allouer par la commune est calculée sur la base du montant moyen que celle-ci verse, par l'élève, pour le fonctionnement des écoles publiques établies sur son territoire.

De son côté, l'Etat rembourse à la commune les frais afférents à l'enseignement et est directement responsable des traitements à verser au personnel enseignant tant des écoles publiques que des écoles privées.

En ce qui concerne l'enseignement postprimaire, le ministre de l'Enseignement et des Sciences établit chaque année un "plan de subvention scolaire". Ce plan indique les écoles d'enseignement postprimaire - tant publiques que privées - qui entreront en ligne de compte, au cours des trois années civiles suivant l'établissement du plan, pour un financement par les deniers publics; le plan de subvention scolaire comprend en tout cas les écoles dont on peut raisonnablement attendre, sur la base de prévisions, qu'elles seront fréquentées par un nombre d'élèves répondant aux normes fixées par la loi. Les

> plans de subvention scolaire visent à agencer les multiples formes d'enseignement postprimaire en un ensemble équilibré et cohérent, s'étendant le plus efficacement possible sur tout le pays. La fixation de normes numériques garantit qu'aucune demande légitime ne sera négligée lors de l'établissement du plan triennal.
>
> Dans l'enseignement postprimaire aussi, les pouvoirs publics financent les écoles publiques et les écoles privées selon les mêmes critères. D'une manière générale, ce sont les réponses des écoles de l'Etat qui servent de base au calcul des subventions. Tous les frais - tant les frais de personne que les dépenses matérielles - sont directement remboursés par l'Etat. (MAFFEPB, 1971).

Financing and budgeting of special education is made on the basis of category of exceptional children by type of special school.

Comments: It was not possible to spend enough time in Holland to study in more detail the educational system of the country. The only information on this system was presented by special education personnel. Nevertheless, Holland could be used, as much as the information gathered can show, as an example of how a non-integrated system might be changed. All elements of Table 9 should be analysed in detail. This country has developed a great knowledge on exceptionality and special intervention technology. The evolution of special education in Holland will follow the proposed adaptation of the entire school system. There is room for more integration of practices according to most specialists interviewed in the Dutch Schools.

FRANCE

The French educational system is based on program arrangements that easily emphasize differentiation. The French system is a complex set of different program avenues to be followed in the schools. Figure 29 represents the actual "organisation des enseignements" in France, while Table 13 summarizes the organization of special education in that country. If this information is related to the actual state of the French system, it should be mentioned that major changes are proposed. Since the Law of July 11, 1975 was adopted, a new school reform was initiated. In March, 1976 the first operationalized rules for the 1977 school year were proposed to the members of the educational system. Therefore, the following analysis of the French educational system takes into consideration the actual as well as the proposed states of French education.

The school reform that was introduced by the law of July 1975 is oriented toward equality of chances for students.

> Le projet de décret réorganisant, à partir de la rentrée scolaire de 1977, la formation dans les écoles maternelles et élémentaires a pour objectifs essentiels de compenser les handicaps qui nuisent à l'égalité des chances et d'apporter les éléments éducatifs de base permettant à tous les jeunes Français de recevoir dans de bonnes conditions une formation secondaire. (Haby, 1976).

1- Self realization

One of the most crucial elements of the French education reform is described by Hall as:

> The democratization of education will inevitably bring about a meritocratic form of society, with a hierarchy based on intellect, character and personality rather than on traditional factors. (Hall, in Capelle, 1967).

Figure 29

The Structure of Education in France

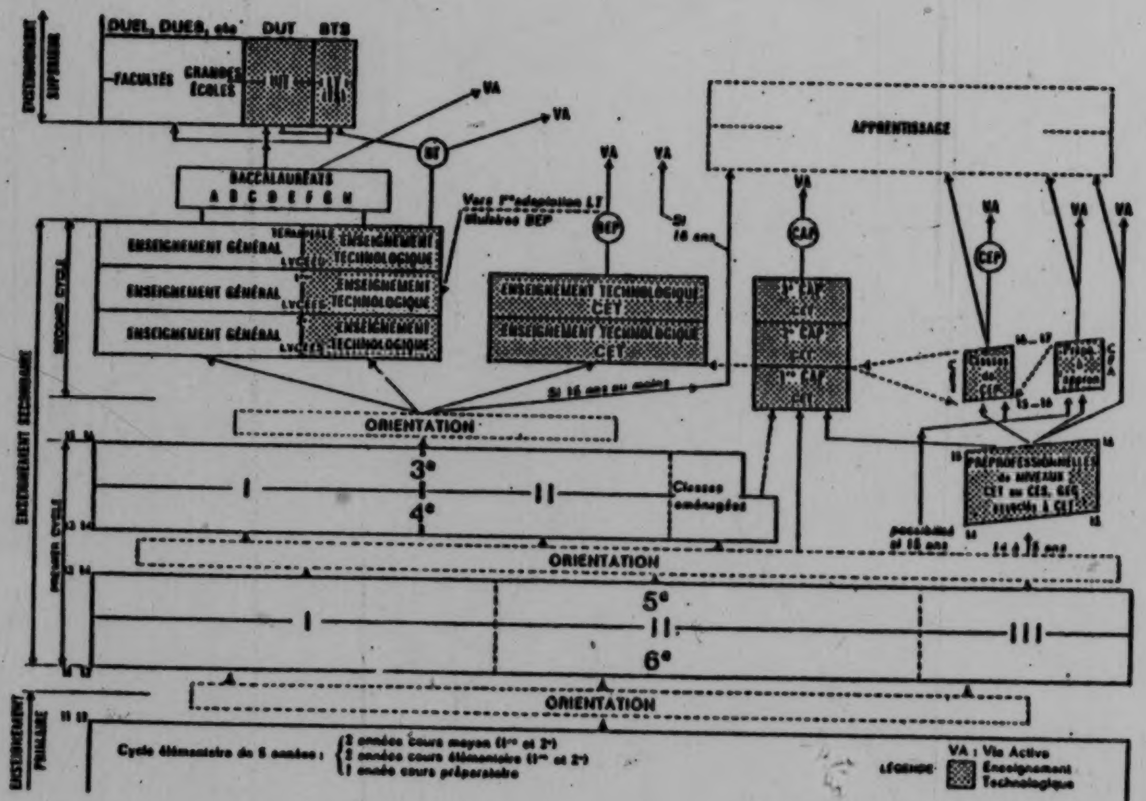

ENSEIGNEMENT SUPÉRIEUR
DUEL, DUES, etc
DUT
BTS
FACULTÉS
GRANDES ÉCOLES
IUT
STS
VA
BT
BACCALAURÉATS
A B C D E F G H
Vers l'adaptation LT
diplômes BEP
ENSEIGNEMENT SECONDAIRE
SECOND CYCLE
TERMINALE
ENSEIGNEMENT GÉNÉRAL
ENSEIGNEMENT TECHNOLOGIQUE
LYCÉES
ENSEIGNEMENT TECHNOLOGIQUE CET
BEP
Si 16 ans
Si 16 ans au moins
APPRENTISSAGE
CAP
3e CAP CET
2e CAP CET
1re CAP CET
CEP
Classes de CEP
Prépa. à l'appren.
CPA
16–17
15–16
PRÉPROFESSIONNELLES de NIVEAUX CET ou CES, CEG annexés à CET
possibilité à 15 ans
14 à 16 ans
ORIENTATION
PREMIER CYCLE
3e
4e
I
II
Classes aménagées
5e
6e
III
ENSEIGNEMENT PRIMAIRE
11
12
13
14
15
16
Cycle élémentaire de 5 années :
2 années cours moyen (1re et 2e)
2 années cours élémentaire (1re et 2e)
1 année cours préparatoire
LÉGENDE
VA : Vie Active
Enseignement Technologique

Table 13

Special Educational Delivery System in France

(a) Maintien de l'enfant en classe ordinaire

- sous la surveillance et avec l'aide du "groupe d'aide psychopédagogique" (psychologue et rééducateurs)
- sous la surveillance et avec l'aide du "centre médico-psychopédagogique" (neuro-psychiatre, psychologue, rééducateurs, travailleurs sociaux).

(b) Placement en classe d'adaptation (avec l'un ou l'autre des deux types d'aide ci-dessus).

Classes aussi peu ségrégatives que possible (fonctionnent dans une école de type ordinaire et ayant des activités communes avec les classes ordinaires) dans lesquelles le séjour est limité (maximum 2 ans) et destiné à préparer le retour en classe normale.

Elles accueillent les "cas limites", les enfants présentant des retards de maturation, rencontrant des problèmes de langage, d'apprentissage, des problèmes relationnels.

(c) Placement en classe spéciale annexée à une école de type ordinaire dans la perspective d'un séjour plus long pour les enfants dont le handicap est plus durable (sensoriels, moteurs, déficients intellectuels).

(d) Placement en sections (groupe de classes) spéciales ou établissements spécialisés d'externat au niveau de l'enseignement moyen et de second degré (12 - 16; 16-18)

- pour les déficients intellectuels légers: sections d'éducation spéciale de 90 élèves, annexées aux écoles moyennes (collèges d'enseignement secondaire) et assurant un complément d'enseignement général ainsi qu'une formation professionnelle;
- pour les autres handicapés, des collèges d'enseignement secondaire spécialisés annexés à des collèges d'enseignement secondaire ordinaires (120 à 180 élèves).

L'importance des effectifs regroupés tient à la nécessité de donner aux élèves la possibilité d'une orientation permanente (professionnelle pour les déficients intellectuels, scolaire pour les autres).

(e) Placement en établissements spécialisés munis d'internats (écoles nationales pour handicapés) généralement au niveau de l'école moyenne 12-16 ans) ou du second degré (16-19) pour les enfants des milieux ruraux dont la population est trop dispersée pour qu'une desserte en externat soit possible.

Ceux qui peuvent réintégrer un établissement ordinaire sont invités à le faire et y reçoivent les aides spécifiques nécessaires.

(f) Placement en établissements hospitaliers ou à dominante thérapeutique à l'intérieur desquels des classes spéciales sont ouvertes

- instituts médico-pédagogiques et médico-professionnels pour les déficients intellectuels.
- hôpitaux, maisons de soins et de cure, centres de rééducation pour les autres catégories.

This statement characterizes the change in the French educational system relative to the equality of opportunity. One can think of the traditional French school as one favorable to the most wealthy students, and one based on tradition of authority and importance of knowledge. The elementary school had as objectives: (a) first, to inculcate successfully, the three fundamental means of expression: reading, writing, and arithmetic, (b) second, to arouse the natural curiosity of children about the world which surrounds them, and (c) lastly, to develop in them the sense of belonging to a community, as well as to make them aware of the values which determine its effectiveness and of the duties laid upon each of its members. (Capelle, 1967). It is not surprising that the French reform tends to be directed toward the abolishment of an "élite" type of education. Many social pressures have motivated this move; however, the meritocratic approach tends to bring into the school certain values that cannot be seen as leading to self-realization. Merits are described in terms of the acquisition of knowledge type thus creating another type of "élite" in the schools. French education has tried to abolish the aristocratic "élite" but seem to have replaced it by an intellectual "élitism". This move can be related to previous reforms. The reform movement did not have the objective of individual self-realization as its basic motivation. The actual school reform, however, is going further toward such an individualization of the education process. A second stage movement for equality of opportunity in France is starting to introduce the roots of individualization and the basic belief in self-realization as the aim to be pursued in education. At another level, French specialists in pedagogy have been writing on a self-realization pedagogy. It seems that their contribution to the science of education may have an impact on the school system in future years.

1.1 Individualized instruction. It is possible to find in the reform these elements of such a trend in the elementary and pre-school level:

> La réforme crée un véritable cours préparatoire sur mesure (article 6), permettant de moduler la progression au rythme de l'enfant. Ce n'est plus l'enfant qui est contraint de s'adapter à l'école, mais l'école qui s'adapte à l'enfant.
>
> Ainsi, bien loin d'opérer un tri entre les élèves en les dirigeant vers des filières distinctes, le projet donne à tous les enfants, à la fin du C.P. 2, la même force pour pouvoir parcourir, à la même vitesse, la suite de la scolarité primaire.
>
> Dans le nouveau système, l'enfant trouve le temps de bien apprendre avec un maître qui n'est plus "le livre qui parle" mais l'éducateur attentif à son évolution et le conseiller de sa famille. (Haby, 1976).

At the secondary level, institutional autonomy is seen as an important factor in individualization of education.

> Le souci d'adapter l'enseignement aux aptitudes et aux goûts de l'élève conduit à assouplir l'organisation des activités scolaires. Cet assouplissement est rendu possible par l'autonomie pédagogique dont jouissent désormais les établissements. (Haby, 1976).

1.2 Curriculum design. A major change is implied at this level in the reform.

> Tout au long de l'école élémentaire, la formation de l'élève ne repose pas sur l'absorption d'un "programme" mais sur la réalisation d'objectifs éducatifs précis. (Haby, 1976).

The "programs" of subject matter as used will be changed to educational objectives. To that point programs were centered on sequential acquisition of knowledge. It can be hypothesized that educational objectives could tend more toward a need-oriented curriculum than a subject-oriented curriculum. Therefore, even if no specific material tended to specify the curriculum design modalities, the intention implied here represents potential for such a curriculum development.

1.3 Organizational growth. It was not possible to analyse or organize a set of data on this topic. Nevertheless, several elements that cannot be thought of as part of the logical framework of organizational growth, such as the Catalyst model, can be identified in the French system.

1. Teachers have a very high job security; there is almost guaranteed permanent employment.

2. Many teachers have access to other economic benefits such as free or low-cost housing.

3. There is a very coercive inspectorship control.

4. The relationships in the schools are very hierarchical.

The reform has also some elements of teachers' and parents' participation in decision-making. Therefore it cannot be said that organizational growth is an objective of the French educational system.

1.4 Definition of exceptionality. The French system is based on a deficiency type of definition of exceptionality and special education is the actualization of such a definition.

> La nature des difficultés de l'enfant peut être d'ordre caractériel ou d'ordre mental ou physique, et se traduire alors par des déficits de l'intelligence, des déficits sensoriels ou encore des déficits physiques. La plupart de ces handicaps ne permettent pas, le plus souvent, l'admission dans une classe ordinaire, et plusieurs exigent l'entrée dans un établissement spécialisé, soit en raison des soins médicaux qu'ils nécessitent, soit en raison de leur dispersion géographique.
>
> Le terme "enseignement spécial" recouvre donc l'éducation scolaire de tout enfant en situation d'inadaptation, quelle qu'en soit l'origine, dispensée dans des classes ou des sections spécialisées annexées aux établissements scolaires, ou dans des établissements scolaires spécialisés, ou encore dans des établissements de caractère médico-pédagogique.
>
> Le dispositif d'éducation spéciale est destiné à l'accueil des enfants et adolescents dont le handicap ou l'inadaptation paraissent durables, et qui nécessitent un placement dans ces classes ou établissements spécialisés. Il comporte:
>
> en ce qui concerne l'éducation préscolaire et élémentaire:
>
> - des classes spéciales, annexées à des établissements scolaires normaux, confiées à des enseignants spécialisés et accueillant un nombre d'élèves relativement peu important (8 à 25 suivant les cas) regroupés par handicap (déficients intellectuels, handicapés moteurs, amblyopes, hypoacoustiques, troubles psychosomatiques, difficultés relationnelles...);
>
> - des établissements spéciaux destinés à l'accueil des enfants qui pour des raisons géographiques (dispersion de l'habitat), familiales ou médicales, ne peuvent fréquenter les classes d'externat évoquées ci-dessus. Il s'agit: des écoles autonomes créées par la loi de 1909 et des écoles nationales créées par la loi de 1951.
>
> en ce qui concerne l'enseignement du second degré:
>
> La nécessité de permettre à l'enfant handicapé d'intelligence normale les choix d'orientation que peut faire son

> camarade non handicapé, comme la nécessité de donner au déficient intellectuel une formation professionnelle correspondant à ses aptitudes, c'est-à-dire, là aussi, une possibilité choix, rendent inévitable le recours non plus à des classes mais à des groupes spécialisés relativement importants.
>
> Pour les déficients intellectuels légers, afin de permettre leur scolarisation sous une forme d'externat non ségrégatif, des sections d'éducation spécialisée ont été annexées à un certain nombre de collèges d'enseignement secondaire. Accueillant les élèves à 12 ans, les conservant jusqu'à 18 ans si nécessaire, elles leur permettent d'acquérir des compléments de formation générale et une formation professionnelle les conduisant à un niveau professionnel convenable. Naturellement, cette solution, qui consiste à rassembler 96 élèves des deux sexes, n'est utilisable que lorsqu'on a à desservir une population relativement agglomérée. Reste à faire la desserte des zones rurales, qui nécessite la mise en place d'internats.
>
> C'est pour faire face à ce besoin que sont construites des écoles nationales de perfectionnement soit pour déficients intellectuels légers, soit pour déficients intellectuels moyens. Elles accueillent les élèves à 12 ans et peuvent les conserver jusqu'à 18 ans, âge auquel ils ont généralement acquis une qualification professionnelle suffisante pour que leur placement professionnel se fasse dans de bonne conditions.
>
> Les autres handicapés, dont l'intelligence est en principe normale, relèvent au niveau de second degré de structures éducatives où ils auront la formation intellectuelle et les possibilités d'orientation qui sont données à leurs camarades non handicapés.
>
> Au niveau du premier cycle leur accueil est assuré dans des établissements spécialisés dont la structure pédagogique est proche de celle des C.E.S. et qui fonctionnent soit en externat dans les grandes villes (situés autant que possible près d'établissements normaux pour éviter la ségrégation) soit en internat pour la desserte des zones dont l'habitat est plus dispersé.
>
> De même, au niveau du second cycle, ce sont des établissements de types C.E.T. ou de type Lycée qui sont nécessaires pour l'accueil des adolescents qui n'auront pu intégrer à ce niveau une scolarité normale. (Ministère Education National Français, 1973).

Furthermore, there is an integrated delivery system identified as "le dispositif d'adaptation".

> Il s'agit de mesures décrites par la circulaire du 9 février 1970, à l'intention des enfants dont le handicap paraît temporaire (échec scolaire non lié à un déficit intellectuel irréversible, proglèmes de comportement...)
> Elles ont pour objet:
> - d'une part, la mise en place au niveau préscolaire et élémentaire de "groupe d'aide psycho-pédagogique", équipes constituées par un psychologue et deux rééducateurs, chargées d'apporter à l'enfant, aux maîtres, aux familles, les moyens de résoudre les problèmes d'adaptation rencontrés;
> - d'autre part, la mise en place au niveau préscolaire, élémentaire et secondaire de "classes d'adaptation" destinées à accueillir pendant un temps relativement court des enfants qui ont des difficultés à s'adapter à l'enseignement normal, afin de leur donner, grâce à un enseignement individualisé, des rééducations appropriées et une observation continue multidisciplinaire, les moyens d'une meilleure intégration scolaire. (MENF, 1973).

1.5 Competence-based intervention. The progress toward individualization of instruction can be an indication of the move to a competence-based intervention in the French schools. Actually, teaching is based on a deficiency approach as discussed in 1.4.

2- Equality of learning experiences

It appears that equality in the French system is related to greater access to the higher economic and social life. The abolishment of social classes for a society is only one part of the egalitarian concept. The French solution to social integration follows the same logic as does the Swedish comprehensive school. The one school for all with no early program differentiation is proposed:

> Tous les élèves recevront désormais, pendant les quatre années du collège, le même type de formation.
> Pour en unifier le cadre, un seul modèle d'établissement accueillera les élèves: le collège, se substituant aux C.E.G., C.E.S. et premiers cycles des lycées.

> S'appuyant sur le savoir acquis à l'école élémentaire, le collège offre à tous les élèves:
>
> - un capital commun de connaissances de base et de méthodes de travail, constituant une formation générale de type secondaire;
> - en plus, à partir de la troisième année, des activités complémentaires optionnelles préparant les choix à venir et diversifiant la formation de base.
>
> Le Collège donne ainsi à tous les élèves les mêmes chances, sans les orienter prématurément, mais prépare les choix d'orientation qui seront à faire à l'issue du collège. (Haby, 1976).

Since equality of learning experiences is a concept of cooperative learning, there seems to be a discrepancy between its meaning and a meritocratic system. It is cooperative learning as contrasted with the competitive learning situations that are compared. One cannot think of equality of opportunities, as expressed in the French reform, as being of the same nature as equality of learning opportunities. The first one is related to access to wealth (economic primarily) and is based on a competitive personal value market. The second is based on cooperative learning and individual self-realization through maintaining an open educational system devoted to the non-competitive uses of individual competencies.

2.1 Instructional systems. It was not possible to observe a direct implication of the specific instructional system model defined in this thesis; nevertheless, parts of the reform appear to be related to the approach.

> Une nouvelle organisation plus souple regroupe les élèves selon l'action pédagogique qui leur convient. Si les élèves demeurent en effet répartit comme à présent en classes, ils peuvent, en cas de besoin, être réunis en

> groupes restreints issus d'une ou plusieurs classes selon l'action différenciée qui leur est nécessaire. Cette souplesse permet en particulier d'apporter à l'élève qui connaît des difficultés un soutien par des actions pédagogiques spécifiques.
>
> Ainsi, il sera possible d'ajuster les connaissances de l'enfant, dans un ou plusieurs domaines, au niveau de sa classe.
>
> Les élèves ayant des difficultés graves peuvent, sur prescription des commissions de l'éducation spéciale, bénéficier d'enseignements d'adaptation donnés, soit par des spécialistes extérieurs à l'école, soit par des maîtres spécialisés, dans des groupes d'adaptation dans lesquels les élèves sont réunis pendant tout ou partie de la semaine scolaire. Une éducation spéciale est dispensée aux élèves dont la gravité du handicap rend indispensable, au moins pour un temps, la mise en oeuvre de pratiques pédagogiques et thérapeutiques exigeant des structures d'accueil particulières.
>
> Cette organisation plus efficace de l'école élémentaire ainsi que le renforcement du cycle préparatoire doivent permettre à l'avenir de diminuer le nombre de redoublements: l'enfant pour lequel un redoublement s'avérerait malgré tout nécessaire aura la possibilité de recommencer son année. (Haby, 1976).

2.2 Evaluation. The quotation in part 2.1 indicated the need for evaluation of student progress. It was not possible to study in depth the evaluation process in the French system. From one set of the opinions reported, it appears that evaluation relates to acquisition of knowledge and is related to academic programs rather than to developmental factors.

2.3 Pre-school developmental services. In France there are pre-elementary education services for children of 2 to 6 years age. Pre-elementary education is not compulsory and free. Therefore, children can start their educational system membership at the age of 2.

2.4 Integrated development. Not enough information was available on this item.

2.5 Free developmental services. In France, education and special education are almost free. In fact, public education is free. There are, however, private schools or institutions (for example schools for mentally retarded), that belong to profit organization and therefore are not free. Also, university level studies are not free, but bursaries are available for students.

3- Functional integration

Even if most special education in France is not provided within the regular schools there is a tendency to create a set of relationships between all specialists who are related to developmental intervention. The reform in progress tends to accentuate functional integration.

> Dans la nouvelle école, l'élève est réellement le centre de l'action pédagogique. Ses parents, ses maîtres, le psychologue scolaire, le médecin, l'assistance sociale et le directeur constituent, pour chaque élève, une équipe éducative qui examine sa situation, ou celle du groupe auquel il appartient, et définit les moyens de sa progression. (Haby, 1976).

3.1 Intrasystem integration. The focus on individualization of education is seen as facilitating the development of educational communities that are the basis of intrasystem integration.

> La personnalisation de l'action pédagogique repose sur l'existence d'une véritable communauté éducative regroupant,

pour chaque école, tous ceux que concerne l'éducation de l'enfant: maîtres, parents et, éventuellement, psychologue, médecin et assistante sociale. (Haby, 1976).

Les familles, dont le rôle dans la réadaptation des handicapés apparaît de plus en plus nettement seront de plus en plus étroitement associées à l'effort collectif entrepris en faveur de leurs enfants.

Elles seront, grâce à l'intervention des groupes d'aide psycho-pédagogique et des commissions médico-pédagogique:

- informées avec soin sur la nature et le degré du handicap, sur les aides spécifiques qu'il rend nécessaires, sur les conséquences que peut entraîner pour son avenir la situation de l'enfant;
- conseillées et consultées sur les mesures à prendre, mesures auxquelles le plus souvent elles doivent, pour une pleine efficacité, être étroitement associées;
- aidées à résoudre les problèmes concrets (transport, financement) que fait surgir le handicap;

Les maîtres de classes ordinaires, appelés à recevoir, avec l'aide du groupe d'aide psycho-pédagogique, des handicapés, recevront du groupe lui-même tous conseils et toute assistance nécessaires. Il va de soi qu'ils devront en outre recevoir, en particulier au cours des recyclages dont ils bénéficieront systématiquement, toutes informations utiles leur permettant de résoudre eux-mêmes de la meilleure manière les problèmes les plus courants que de telles intégrations pourront faire surgir;

Enfin, à l'occasion de ces problèmes, l'équippe éducative que constituent tous les enseignants de l'école, membres du groupe d'aide psycho-pédagogique et médecin scolaire compris, sera amenée à des échanges fréquents destinés à fonder une action concertée au long de la scolarité de l'enfant. (MENF, 1973).

3.2 Intersystem integration. Si le Ministère de l'Education Nationale tient des textes organique une responsabilité qui s'étend à l'ensembre des établissements accueillant des enfants ou des adolescents d'âge scolaire, handicapés ou non, d'autres départements ministériels ont également des responsabilités dans le domaine de l'éducation spéciale.

Cette répartition est liée à des causes historiques plus qu'à une logique fonctionnelle, et les efforts de coordination entre les ministères concernés sont utiles et efficaces dans la mesure où ils apportent une harmonisation et tendent à donner à chaque département ministériel les responsabilités que sa fonction générale inclue normalement (éducation, traitements, prévention ou surveillance des délinquants).

> Dans le cadre du fonctionnement du Comité interministériel crée par le décret du 9 septembre 1970, qui a mis au point un décret sur l'éducation spéciale et un décret sur les centres médico-psycho-pédagogiques, sont entreprises à l'heure actuelle:
>
> - la coordination des formations de personnel (enseignants spécialisés, éducateurs, rééducateurs...) et la mise au point d'une collaboration étroite de l'Education nationale et de la Santé publique dans certaines de ces formations (maîtres pour aveugles, pour sourds...);
> - la coordination des implantations d'établissements (poursuite des travaux des commissions de coordination régionale);
> - la coordination des contrôles de fonctionnement compte tenu de la fonction principale de chaque ministère;
> - la mise au point en commun de guides, répertoires, fichiers techniques;
> - l'étude des possibilités de mieux coordonner sinon de fusionner les commissions chargées au niveau départemental d'orienter les handicapés.
>
> Dans le même temps, le Ministère de l'Education Nationale met progressivement en place un nouveau dispositif d'adaptation. (MENF, 1973).

4- Openness to community

It has not been possible to study this dimension of the French educational system. Therefore, no discussion is made on items 4, 4.1 and 4.2.

5- Decentralized integrated planning

Hall (1967) has given a point of view on the French approach to reform as compared to that of Sweden:

> The Swedish measures, such as the introduction of a comprehensive, unitary school, have been based on empirical research mainly of a psychological nature; although the prime motivation for reform was social and even utilitarian. In France the grounds for change were likewise social, although to them was soon also added an instrumentalist dimension; comparatively little empirical research was carried out before the promotion of reforms, except on a social basis. French educators have tended to proceed from first principles, identifying problems and isolating the elements of them in true

> Cartesian fashion before resolving them and proceeding to a new syntheses. In Sweden careful psychological investigations appeared to show that little or no selection or differentiation should take place in school before the age of 16: hence the grondskola, the French, by logical process, have likewise arrived at a "common school"; but only for the 11-15 age groups. (Hall, 1967).

Long-range planning follows a centralized pattern in France. Reforms are logically determined and decided upon at the state level. Since most educational realities are inscribed in the laws of the nation, reforms also come from the same contexts.

5.1 Local long-range planning. Even if the major moves in the French educational system are always generated at the state level, there are some local jurisdictions in education. Although some communities or departments are involved in educational services, there is a centralized planning process at the state level. Decentralization in the French system appears to be more of a control nature than one of a local development type.

5.2 Participation in decision-making. The reform proposes the elaboration of participatory committees for parents and teachers.

> Pour la première fois, les parents sont étroitement associés à la vie de l'école. Ils sont représentés par le comité des parents qui donne son avis sur tous les problèmes de la vie scolaire.
>
> Ce comité forme avec le conseil des maîtres l'organe qui donne vraiment sa personnalité propre à l'école et à ses actions éducatives: le conseil de l'école auquel participent également les personnels chargés des fonctions de psychologue scolaire et de rééducation, le médecin chargé

> du contrôle médical scolaire et l'assistance sociale. Le conseil de l'école est présidé par le directeur qui anime et coordonne toutes les activités scolaires.
>
> En instituant un comité des parents, étroitement associé à la concertation et aux décisions, et un conseil d'école, la nouvelle organisation personnalise chaque école et répond au désir de participation des parents. (Haby, 1976).

5.3 Securing control. One of the most criticized elements of the French school system is the nature of control by the inspectorship in the schools. The inspectors are responsible to the state for all educational affairs. They are members of the "Conseil départemental de l'enseignement primaire", for example, and this council exercises control in these jurisdictions:

> Attributions pédagogiques: le Conseil départemental arrête l'organisation pédagogique des diverses catégories d'écoles publiques du département, les règlements relatifs au régime des écoles élémentaires, il veille à l'application des programmes, méthodes et règlements et donne son avis sur les réformes.
>
> Attributions administratives: le Conseil départemental délègue à un tiers de ses membres le droit d'entrer dans les écoles publiques et privées du département. Il désigne les délégués départementaux de l'Education nationale. Il est consulté pour ce qui concerne la carte scolaire des écoles élémentaires. Il dresse la liste d'admissibilité aux fonctions d'instituteur et d'institutrice titulaires.
>
> Il délibère sur les rapports et propositions de l'inspecteur d'académie. Il discute le rapport annuel de l'inspecteur d'académie.
>
> Attributions contentieuses: le Conseil départemental juge les oppositions à ouverture d'école privée. Il statue en dernier ressort sur les contestations relatives à l'inscription d'un élève à l'école publique.
>
> Attributions disciplinaires: le Conseil départemental prononce l'interdiction à temps ou absolue contre les membres des écoles publiques, l'avertissement, la censure, la suspension, l'interdiction contre les membres de l'enseignement privé.

> Il donne un avis motivé sur le retard d'avancement, la censure, la rétrogradation, la suspension sans traitement, la révocation des instituteurs publics.

There is a strong pressure to change this type of relationship in the control process.

5.4 Funding. In France, there are state level and local level expenditures for education as well as private organizations (non-profit) that are involved in financing education. These associations are mainly related to special education. They are groups of parents or friends of the handicapped, for example, who open their own institution and assume the costs. These institutions are separated from the regular school system and are identified by categories of exceptionality.

Comments: France has undertaken an educational reform in order to bring equality of opportunity to its schools. According to the model of special education developed in this thesis, there is a different understanding of the concept of equality of opportunity in the two contexts. Elements of the French reform are directly related to the proposed model of this study but the global reform is not oriented toward the basic self-actualization goal. In fact, it appears that this country is not involved in a process of organizational growth nor in a decentralized planning process. The state level is at the center of the reform and will govern the new social order that will follow the actual school reform. One remark that was often made in the visits to schools and interviews with education specialists was that the actual reform was believed to be more politically oriented than motivated by the well being of the child and concern for his personal development. Even if this statement is only a matter of opinion, it is nevertheless indicative of a need for greater decentralization of planning and for a child-centered educational system. In relation to the discrepancy analysis, France ought to be involved in the analysis of the motivating factors of its reform in order to look back to other meanings of equality. Action should also be initiated in order to develop an organizational growth approach, and following this, the decentralization and reorganization of control in the schools.

QUEBEC

The last educational system to be analysed in this chapter is that of the Province of Quebec. The province of Quebec school system is in its twelfth year of the educational reform initiated by the findings of the Royal Commission of Inquiry on Education (Commission Parent). The entire school system has been affected by the recommendations of propositions and reactions to the reports published by the Commission. The reform was based on principles published in the Rapport Parent (1964). Some of the major guidelines for this reform at the elementary level established that:

> L'enfant a besoin d'un enseignement concret et d'une activité créatrice.
>
> L'école doit faire en sorte que ce soit l'enfant lui-même qui explore son milieu et en tire la matière de son développement intellectuel.

> L'école élémentaire doit tenir compte des différences individuelles. L'intelligence, la santé, les aptitudes, la préparation fournie au préalable par la famille et le milieu social varient beaucoup d'un enfant à l'autre.
>
> L'école élémentaire doit donner aux enfants un bon commencement de formation intellectuelle. Préparer l'écolier à l'enseignement secondaire c'est lui donner la formation de base et l'entraînement au travail personnel bien plus que l'informer un peu sur toutes choses.
>
> L'école élémentaire doit favoriser l'adaptation de l'enfant aux conditions de la vie moderne. L'enseignement, le régime disciplinaire, toute l'organisation de la vie scolaire doivent en tenir compte. Ces attitudes mentales et affectives lui viendront en bonne partie des méthodes d'enseignement, de l'orientation, de la discipline, du climat général de l'école. (CREEQ, 1964).

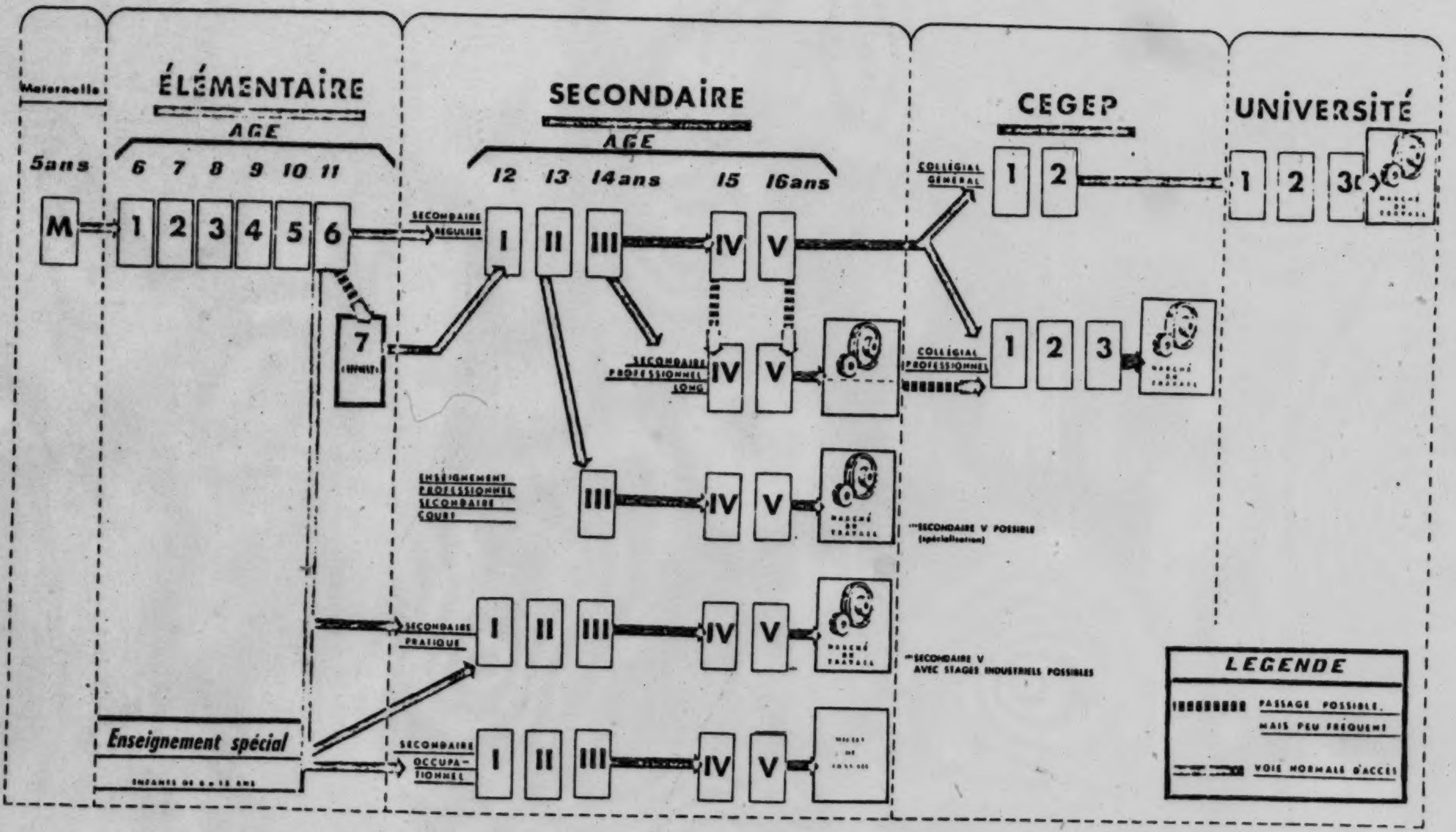
At the secondary level an integrated type of school was implemented, "L'école secondaire Polyvalente", which is a comprehensive secondary school. College or post-secondary education was created and resulted in the organization of the C.E.G.E.P. (Collège d'enseignement général et professionnel). Figure 30 represents the actual state of the Quebec educational system in terms of programs. Elementary and secondary and even college level education are provided through integrated comprehensive schools.

The organization of special education was also affected by the "Rapport Parent" but at the time the nature of the recommendations dealt with a medical and categorical approach to the problem.

> On peut classer les enfants exceptionnels en deux catégories, selon le genre de soins et d'éducation qu'ils requièrent; cette classification est beaucoup moins complexe que celle qui se base sur les caractères physique, intellectuel, scolaire, affectif et social des divers

Figure 30

The Structure of Education in Quebec


Maternelle
5ans
M
ÉLÉMENTAIRE
AGE
6 7 8 9 10 11
1 2 3 4 5 6
7
SECONDAIRE
AGE
12 13 14ans 15 16ans
SECONDAIRE REGULIER
I II III IV V
SECONDAIRE PROFESSIONNEL LONG
IV V
ENSEIGNEMENT PROFESSIONNEL SECONDAIRE COURT
III IV V
MARCHÉ DU TRAVAIL
**SECONDAIRE V POSSIBLE (spécialisation)
SECONDAIRE PRATIQUE
I II III IV V
**SECONDAIRE V AVEC STAGES INDUSTRIELS POSSIBLES
SECONDAIRE OCCUPATIONNEL
I II III IV V
Enseignement spécial
CEGEP
COLLÉGIAL GÉNÉRAL
1 2
COLLÉGIAL PROFESSIONNEL
1 2 3
UNIVERSITÉ
1 2 3
LEGENDE
PASSAGE POSSIBLE, MAIS PEU FRÉQUENT
VOIE NORMALE D'ACCÈS

> handicaps. On a ainsi un premier groupe d'enfants souffrant d'un handicap temporaire, et donc curable si on y remédie à temps (mésadaptés, arriérés pédagogiques, cas cliniques d'apprentissage): ces enfants ont besoin de rééducation. Le deuxième groupe comprend les enfants souffrant d'un handicap permanent et irréversible (déficients mentaux, aveugles, sourds, etc.); ni l'école ni la famille ne peuvent pourvoir à leur éducation; leurs cas nécessitent une éducation spéciale.
>
> Les solutions à envisager au problème de l'enfance exceptionnelle doivent tenir compte d'un certain nombre de principes fondamentaux que nous tenons à rappeler:
>
> a) chacun ayant droit à l'éducation et l'Etat ayant une importante responsabilité en ce domaine, notre système d'éducation doit s'occuper de tous les enfants susceptibles de profiter de l'éducation, non seulement des enfants normaux, mais aussi des exceptionnels qui requièrent une éducation spéciale complète ou des mesures temporaires ou partielles de rééducation;
>
> b) l'éducation des exceptionnels doit, chaque fois que la condition de l'enfant le permet, se rapprocher le plus possible de l'éducation régulière, et ne comporter que les modalités spéciales vraiment indispensables, cela enfin de faciliter l'intégration de ces enfants parmi les autres enfants et dans la société;
>
> c) les handicapés physiques possédant une intelligence normale ont droit à une éducation complète de même niveau que celle qu'on offre aux autres enfants mais tenant compte de leur handicap particulier; ils ont droit de s'intégrer à la société pour tout ce qui concerne leur culture, leurs loisirs, leur travail professionnel;
>
> d) l'éducation des exceptionnels doit tenir compte de l'unité de la personne et assurer aux enfants une éducation complète (formation générale et formation professionnelle) harmonieusement agencée: enseignement régulier ou spécial, complété par les soins médicaux, psychologiques ou pédagogiques requis, ou par des mesures de rééducation physique ou intellectuelle, préparation à la vie et à un travail utile;
>
> e) l'éducation des enfants exceptionnels doit être aussi gratuite - mutatis mutandis - que l'éducation offerte aux enfants normaux. (CREEQ, 1964).

In 1970, the "Conseil supérieur de l'éducation", a consultative commission to the Minister of Education presented a critical analysis of the state of special education in Quebec. The recommendations of the Council (presented in Appendix 1), directed the Minister of Education to state clearly the policy concerning the education of exceptional children. To the Council it appeared that very little had been made since the "Rapport Parent".

The general observation that can be made about the 1964-1970 period and also about the last few years, is that special education in the Province of Quebec has not followed the rest of the educational system in the general reform proposed by the Parent Commission. Perhaps one of the weaknesses of the Parent report, and of the action that followed, was related to the fact that the qualitative educational reform only affected regular education while special education was placed on a quantitative type of development. The reform had as a goal: to increase the amount of educational services and also to raise the quality of education by focusing on the child's needs. In special education, this was translated merely into the expansion of more services or, in other terms, the proliferation of special services (special schools and classes) for exceptional children. The last three or four years, however, have marked a change of pace in that evolution. The changes to be made in both regular and special education were becoming more and more interrelated and were the object of a common planning effort. The actual state of this relationship will be the basis of the analysis of the Quebec educational system.

Finally, another important contributing sector has developed between different governmental agencies that offer services to exceptional children. For instance, while the welfare and health (Social Affairs) department was developing the normalization approach for its services, the education department was becoming involved in integration. Both processes were based on reciprocal planning as will be discussed in the following section.

In accordance with the Parent Commission recommendations, the Department of Education published in 1966 a document on "L'école coopérative, polyvalente et progrès continu" which proclaimed that:

> que l'organisation de l'enseignement à l'élémentaire sera tout entière axée sur l'enfant, facilitant l'adaptation aux différences individuelles;
> que l'école élémentaire devra favoriser le développement harmonieux de l'enfant aux point de vue intellectuel, affectif, physique, social, moral et/ou religieux. (M.E.Q., 1966, p. 16).

> L'enseignement, au niveau élémentaire, tend à favoriser le développement maximum, équilibré et intégral de chaque enfant par une démarche de croissance et de développement personnifiée, de plus en plus autonome et ce, comme participant d'une société.
> Cette forme d'organisation pédagogique répond également aux exigences des deux principes fondamentaux qui inspirent toute notre organisation scolaire:
> assurer le développement équilibré de l'élève;
> respecter les caractéristiques individuelles de chacun. (M.E.Q., 1976, pp. 16-17).

These basic principles which identified the official objectives of the Elementary school were developed into a list of operative goals classified in three categories: (1) objectives related to the learner (the student); (2) objectives related to the learning environment (the school); and, (3) objectives related to the cooperative agent (the teacher). These objectives are presented in Table 14 with the proposed goals to which they relate.

1- Self realization

As presented in Table 14, the elementary school activities should favor the integral development of the child focusing on intellectual, emotive, social, physical, moral and religious factors.

1.1 Individualized instruction. Individualization is seen as related to three factors of the teacher's tasks: the means, the time spent and the performance.

> Favoriser l'individualisation de l'enseignement, c'est rechercher le développement de chaque enfant par le respect, l'exploitation et le perfectionnement maximum de sa personnalité, sur les plans physique, affectif, intellectuel, social, moral et/ou religieux.
>
> En pratique, c'est s'assurer que l'enfant, dans la poursuite des objectifs de l'enseignement élémentaire, puisse vivre des expériences d'apprentissage significatives qui tiennent compte de ses besoins, de ses intérêts et de ses aptitudes, en prenant comme point d'appui son environnement.
>
> La réalisation de l'individualisation de l'enseignement repose sur trois variables:
>
> - sur le plan des moyens:
>
> activités diversifiées à approches multiples, évaluation intégrée au processus d'apprentissage, situations d'apprentissage souples;
>
> - sur le plan du temps:
>
> durée de l'activité, non simultanéité des moments où tel objectif sera poursuivi;
>
> - sur le plan de la performance:
>
> les objectifs peuvent être atteints selon divers degrés de perfectionnement. (MEQ, 1976).

Associated with this view of individualized instruction is continuous promotion:

Table 14

Province of Quebec Elementary
Education Objectives

Objectives by categories	Related items from Table 9
PAR RAPPORT AU S'EDUQUANT, L'ELEVE	
. Diversifier les activités de l'élève de façon à permettre son perfectionnement sur tous les plans de la personnalité: intellectuel, affectif, social, physique, moral et/ou religieux.	1
. Donner une formation de base dans la langue parlée et écrite, les mathématiques, les sciences et les arts.	1.2
. Favoriser chez l'enfant une maîtrise suffisante de ses moyens d'expression et de communication.	1.2
. Favoriser l'auto-apprentissage, c'est-à-dire concevoir l'apprentissage comme un processus de recherche et de découvertes individuelles.	1.2
. Habituer l'élève au travail d'équipe et à la vie en groupe.	1.2
. Rendre l'élève capable de solutionner des problèmes divers par l'exploitation de processus mentaux variés et le développement d'habiletés mentales transférables.	1.2
. Faire participer l'élève à l'élaboration de son programme individuel et au choix de ses activités.	2.1

Table 14 (continued)

. Entraîner l'élève au travail personnel.	1.2
. Exploiter et développer l'activité créatrice.	1.2
. Reconnaître l'évaluation comme un processus continu, intégré à l'apprentissage.	2.2
. Favoriser le développement d'attitudes mentales et affectives qui assureront l'indépendance et l'autonomie de l'élève dans la vie moderne.	1.2
PAR RAPPORT A L'ENVIRONNEMENT EDUCATIF, L'ECOLE	
. Maintenir un climat humain où les interrelations personnelles sont empreintes d'authenticité, de considération positive inconditionnelle et d'empathie.	1.3
. Coordonner les forces éducatives du milieu et exploiter cette réalité qu'est l'école parallèle.	2.4
. Assurer l'information, l'appui et la collaboration des parents.	2.4
. Poursuivre des objectifs particuliers d'exécution qui correspondent aux objectifs des programmes-cadres.	1.2
. Exploiter l'environnement et les ressources du milieu.	2.4
. Organiser la vie sociale et disciplinaire de façon à inciter chaque élève et chaque groupe d'élèves à acquérir une conduite autonome.	1.3
. Exploiter les aptitudes particulières de chacun des professionnels de l'enseignement.	1.3 et 1.5

Table 14 (continued)

. Développer l'esprit d'équipe chez les professionnels de l'enseignement.	1.3
. Intégrer l'enfant défavorisé à la vie commune de l'école.	2.4
. Répondre aux attentes du milieu sur les plans spirituel et religieux.	4.1
. Intégrer l'éducation physique, les activités récréatives et sportives à la vie pédagogique, et communautaire de l'école.	2.4
PAR RAPPORT A L'AGENT COOPERATEUR, L'ENSEIGNANT	
. Donner un enseignement concret par la mise en situation-problème.	1.1
. S'accepter comme ressource humaine de première importance.	1.3
. Créer un environnement éducatif stimulant offrant des alternatives de travail.	1.1
. Choisir les méthodes et les techniques d'enseignement en fonction de l'élève.	1.1 et 2.1
. Travailler en équipe et être solidaire des autres membres	1.3
. Tenir compte des caractéristiques individuelles (talents) des élèves dans l'organisation, la réalisation et l'évaluation des activités.	1.1, 2.2 et 2.1
. Organiser les activités de l'élève en situation d'apprentissage favorisant l'intégration des disciplines.	1.2

> Faciliter le progrès continu d'un enfant, c'est s'assurer qu'il peut poursuivre des objectifs qui le développent et le perfectionnent dans une démarche dirigée, mais souple, où les contraintes artificielles et extérieures à lui-même sont réduites au minimum, c'est-à-dire limitées aux exigences du fonctionnel.
>
> a) L'enfant progressant est un être qui se fait, qui se construit de l'intérieur par son activité éducative.
>
> b) Le progrès continu peut être facilité, non décidé par d'autres que l'enfant.
>
> c) Le progrès continu doit être facilité sur tous les plans du comportement.
>
> d) Le progrès n'est pas toujours mesurable.
>
> e) Le progrès continu désigne un avancement qui se poursuit dans la durée et dont l'un des traits essentiels est d'être régulier et sans rupture.
>
> f) Le progrès continu est relié à l'expérience d'apprentissage. (MEQ, 1975).

1.2 Curriculum design. In the Province of Quebec, the Provincial Department of education has jurisdiction over the general objectives of education. Each school, however, can establish an "institutional program" or curriculum.

> Il appartient au Ministère de l'Education de définir les objectifs généraux de l'enseignement dans les programmes officiels. Au plan pratique toutefois, le programme-cadre officiel incite l'école-institution à élaborer son propre programme opérationnel (programme institutionnel). A ce titre, la préférence est accordée, dans bon nombre d'endroits, à une programmation formulée en termes d'objectifs de comportement. Ce choix veut répondre à un besoin de viser des buts compréhensifs, réalisables et dont le degré de succès dans leur réalisation serait mesurable.
>
> L'école soucieuse de répondre aux intérêts et aux interrogations des élèves accepte également de faire réaliser par l'élève des activités qui ne poursuivent pas d'objectifs spécifiques antérieurement souhaités dans un programme institutionnel, ou mieux des activités qui ne visent pas nécessairement à amener des changements spécifiques dans le comportement des élèves.
>
> La question qui se pose dans le choix de ces activités est de savoir apprécier leur valeur pour l'enfant et pour la société.

> C'est une responsabilité du milieu, de l'équipe-école, de se donner des objectifs d'enseignement et d'éducation (programme institutionnel) qui:
>
> - réalisent les objectifs généraux des programmes-cadres officiels;
> - tiennent compte des possibilités réelles du milieu;
> - permettent la poursuite des objectifs généraux de l'école élémentaire;
> - sauvegardent l'un des principes de l'organisation pédagogique proposée, soit le développement équilibré de l'enfant;
> - acceptent de réexaminer les contenus des programmes traditionnels;
> - soient formulés dans la mesure du possible en termes d'objectifs qui incitent à dépasser la simple transmission de connaissances;
> - favorisent l'intégration des disciplines;
> - permettent diverses alternatives pédagogiques.
>
> Dans cette optique et dans l'esprit d'une pédagogie participative, soucieuse du respect de l'élève et de son progrès continu, l'individualisation de l'enseignement se réalise surtout par l'organisation des activités à proposer aux élèves. Les activités dont diversifiées, à la mesure de l'élève, c'est-à-dire adaptées à ses besoins et à ses intérêts, à son style d'apprentissage; leur réalisation est appréciée dans la perspective d'un cheminement personnel et d'un développement équilibré. (MEQ, 1976).

1.3 Organizational growth. The trends to be developed according to the document "L'école élémentaire milieu de vie II" which is the latest formulation of the reform, is to organize a school team.

> Par équipe-école, il faut entendre le personnel de direction, les professionnels enseignants et non enseignants affectés à une école élémentaire, sans exclure le personnel de soutien.
>
> L'importance de l'équipe-école, à savoir, l'engagement individuel et collectif des éducateurs professionnels d'une même école, aux fins de réaliser une oeuvre commune, repose d'abord et avant tout sur l'enfant lui-même qui a besoin d'un climat de constante sécurité. Il appartient spécialement à l'école élémentaire de créer ce milieu de vie où chaque éducateur se sent également responsable et participant d'une même oeuvre.

> Même si le bien de l'enfant suffit à justifier l'importance de l'équipe-école, on ne peut négliger le point de vue de l'efficacité. Alors que tous sont d'accord pour se renouveler, on peut se demander qu'est-ce qui ralentit le changement. A cette fin, il devient utile d'identifier les raisons qui retardent la généralisation de l'organisation pédagogique proposée.
>
> La participation des membres et leur engagement au sein de l'équipe dépend en grande partie du type de relations interpersonnelles existantes.
>
> La personne pour croître, c'est-à-dire se développer, s'actualiser, a besoin d'un contexte de relations humaines positives. Trois attitudes assureront ce climat de relations interpersonnelles positives: l'authenticité, la considération positive inconditionnelle et l'empathie.
>
> Le directeur d'école élémentaire, en tant que leader et premier responsable de la formation de l'équipe dans une école, se préoccupe de:
>
> - établir de vraies relations humaines;
> - créer un climat d'échange;
> - inspirer une confiance telle que ses collaborateurs, les enseignants, se sentent heureux, détendus. (MEQ, 1975).

1.4 Definition of exceptionality. There does not seem to be in the latest reference on the reform any definition of exceptionality nor of special education. One definition that was elaborated by the Inter-Department Commission on Exceptional Children was presented as follows.

> Nous assumons l'unité psycho-somatique de l'homme et nous reconnaissons l'interaction fondamentale de l'individu et de son milieu. Partant, tout obstacle sociologique détermine chez l'homme des comportements globaux d'adaptation plus ou moins réussis; de même la présence dans le milieu d'un individu de constitution irrégulière déclenche des mécanismes instinctifs de défense qui, en retour, déterminent les conduites du sujet impliqué lui-même. Il peut s'ensuivre une inadaptation dont la cause n'est plus dans l'individu lui-même ou dans le milieu mais plutôt dans les rapports qui s'établissent entre l'un et l'autre.
>
> Toute inadaptation, qu'elle tire son origine de l'individu ou du milieu revêt globalement les mêmes caractères généraux: impropriété des conduites psycho-somatiques face

> aux exigences normalisées du milieu; attitudes réactionnelles de l'individu irrégulier qui, instinctivement, recherche le compromis qui préservera son intégrité personnelle, même rudimentaire.
>
> L'enfant inadapté au moment où il prend conscience de lui-même se perçoit très vite comme un être différent, comme un être d'exception. Cette autoperception trouble ce qu'il pense de lui-même, déclenche des attitudes et des conduites qui compliquent davantage son existence et ses relations avec l'entourage.
>
> Hormis certaines conditions pathologiques très caractéristiques, l'enfant inadapté souffre d'anxiété persistante dont l'objet n'est pas toujours défini. Il s'ensuit des états psychologiques perturbés auxquels le milieu immédiat ne réagit pas toujours comme il convient. (G.Q., 1969).

The most significant appendix of the definition though is found in the "Décret tenant lieu de convention collective" of December 1972 presented in Appendix VI. These categorized definitions are the basis for class organization and financing of special education activities.

1.5 Competence based intervention. As shown in Table 14, the pedagogical interventions in the school should be based on the "talent" of the child. In the approach of the Department of Social Affairs to this factor, it is possible to find a strong intention of actualizing the normalization approach.

> Le principe de l'intégration familiale, scolaire et sociale oriente tout le processus d'intervention auprès de l'individu inadapté vers la mise en valeur de la capacité résiduelle de celui-ci plutôt que vers son handicap ou les manifestations de son handicap.
>
> Ce principe reconnaît de plus à l'enfant inadapté, les mêmes droits qu'à tout autre enfant et prône l'intégration de l'inadapté dans son milieu social au même titre que l'enfant physiquement et mentalement sain. (MASQ, 1971).

2- Equality of opportunity

For the exceptional child the Department of Education has two major objectives:

> Le premier est d'assurer à chacun, jeune ou adulte, le maximum d'éducation qu'il est capable d'acquérir et qui correspond à ses aptitudes en même temps qu'à ses ambitions, indépendamment de son niveau de fortune ou du lieu de sa résidence. La deuxième est de préparer d'une façon adéquate les jeunes à la vie pour qu'ils participent activement à l'évolution et au progrès du Québec, tout particulièrement en aménageant le système scolaire de telle sorte qu'il puisse offrir à chacun l'enseignement professionnel qui lui convient.
>
> Cette politique globale du ministère a pour objectif d'intégrer l'inadapté et prévoit pour lui, comme pour les autres, une éducation aussi poussée que le permettent ses aptitudes et qui tient compte des exigences qui découlent de ses déficiences, temporaires ou permanentes, qu'elles soient physiologiques, psychologiques, ou autres. (G.Q., 1969).

2.1 Instructional system. Again no clear statement of the reform of special education is available. However, the elementary school reform without being involved directly in the instructional system model presents some important corresponding factors in terms of student grouping.

> Le classement se transforme en une mesure administrative qui, par l'identification de chaque professionnel de l'enseignement, a pour but de répartir les élèves en groupes d'âge non homogènes sur d'autres plans et de déterminer quel professeur ou quelle équipe de professeurs dirigera leur développement au cours de l'année scolaire.
>
> L'équipe-école en atelier convient de la politique générale du classement. Le personnel de direction de l'école connaît la clientèle de son école et détermine le nombre d'élèves de chaque groupe d'âge. Son travail avec l'équipe-école l'a informé des problèmes particuliers aux différents groupes d'âge et il a pu identifier les qualités pédagogiques de chacun de ses professionnels de l'enseignement.

> Après une consultation individuelle des maîtres, il appartient au personnel de direction de décider quel professeur ou quelle équipe de professeurs aura la responsabilité de tel groupe d'élèves au cours de la prochaine année scolaire.
>
> Le maître est identifié à partir de:
> - ses options pédagogiques
> - ses intérêts
> - sa méthodologie
> - ses aptitudes particulières
> - son expérience
> - ses relations interpersonnelles
>
> ... (MEQ, 1975).

Grouping can be at the center of the elaboration of work groups.

> Le groupe de travail, c'est la réunion d'un certain nombre (plus ou moins grand, plus ou moins petit) d'élèves susceptibles de pouvoir travailler ensemble à leur perfectionnement réciproque dans la poursuite d'objectifs communs.
>
> Compris de cette façon, le groupe de travail a des dimensions variées et son degré de permanence est imprévisible. En principe, on ne peut former des groupes de travail comprenant un nombre uniforme d'élèves, ni pour un temps déterminé, non plus qu'on puisse viser à former des groupes homogènes.
>
> Cette conception du groupe de travail suppose la compréhension des objectifs de l'école élémentaire et la conception de l'apprentissage comme un processus de recherche individuelle.
>
> La fausse sécurité que donne aux enseignants l'homogénéité des "classes" telles qu'elles sont constituées aujourd'hui, engendre le plus souvent la dépersonnalisation de l'enseignement. Enfin, il est dangereux pour un maître, d'avoir le sentiment d'être en présence d'enfants "semblables", surtout lorsque cette similitude se définit exclusivement en termes d'habiletés ou d'inaptitudes à l'égard d'une discipline donnée ou d'un groupe de disciplines déterminées. (MEQ, 1975).

2.2 Evaluation. According to the principles included in the reform, evaluation is an individualized process and should also account for environmental factors.

> De façon formelle et périodiquement, l'élève fait l'objet d'une évaluation qualitative individuelle (établissement du profil), sur le plan des comportements intellectuel, physique, affectif et social. Son profil est établi à partir:
>
> - des travaux réalisés par l'enfant
> - des données consignées au bulletin scolaire et à la "feuille de route"
> - de l'évolution antérieure de son rendement scolaire et de son développement général
> - des observations et de l'avis des professeurs non enseignants en cause.
>
> L'évaluation individuelle de l'élève a avantage à déborder le milieu scolaire proprement dit. La connaissance du milieu d'origine de l'enfant, aux plans familial et social, permet à l'école de suppléer plus adéquatement aux déficiences particulières de certains milieux moins bien munis culturellement, ou moralement ou économiquement.
>
> Ce qui importe surtout dans le choix et l'utilisation des critères qui président à la formation des groupes de travail, c'est l'objectif poursuivi, à savoir, permettre de regrouper un certain nombre d'élèves susceptibles de pouvoir travailler ensemble et mutuellement à leur perfectionnement personnel sur les différents plans des comportements intellectuel, physique, affectif, social et moral.

In relation to 2.1 this approach does not propose an exact application of all the elements of the Aptitude by Treatment Interactions system, but again many principles are shared by both approaches.

2.3 Pre-school development services. Kindergarten attendance is compulsory in Quebec. Any services before this level are not directly related to the Department of Education. There is an agreed upon need for early intervention in deprived areas or with cases of severe handicapped individuals. The actual services offered are by the Department of Social Affairs (Health and Welfare), although there are experimental programs developed by the Department of Education mainly in economically deprived areas.

2.4 Integrated development. Special education students, according to the Department of Education, should be integrated in a regular environment.

> Le ministère doit donc organiser les cadres, les structures, les services pédagogiques et les aménagements physiques de son réseau d'écoles publiques pour que l'enfant inadapté puisse y recevoir l'instruction et l'éducation nécessaires. Aucune mesure discriminatoire ou inutilement ségrégationniste ne devra s'exercer: le cadre le plus normal, la classe régulière, sera préféré à tout autre. Les services et mesures techniques pédagogiques et parapédagogiques seconderont les maîtres dans leur enseignement et contribueront à mieux les éclairer sur les problèmes de l'inadapté.
>
> Pour les cas plus graves d'inadaptation, on organisera des classes et des programmes spéciaux: des maîtres préparés à cette fin, se verront confier les jeunes dont les déviations physiques, intellectuelles ou affectives exigent de semblables mesures. Si l'éducation, la rééducation ou la réadaptation nécessitent exceptionnellement un milieu spécial de vie, externat ou internat, c'est le ministère de l'Education qui y dispensera les services éducatifs. (G.Q., 1969).

In Table 14, there was a declared objective of coordination of the education factors or agents in the community for developmental purposes.

2.5 Free developmental services. In the Province of Quebec, the clients do not pay directly for educational, health and welfare services; these are free services. University studies though have to be paid for by the students. There are other types of developmental services (sports, leisure, etc.) that are increasingly offered on a minimal or no charge basis, although there is one important area of services that has not been developed, namely, the post-school services for exceptional children such as workshops and residential assistance.

3- Functional integration

This following governmental statement established the importance of the participation of community groups and interested associations in the monitoring process of educational services.

> Les groupes, institutions et agences communautaires devront, par rapport aux problèmes de l'enfance inadaptée comme par rapport à beaucoup d'autres problèmes faire appel aux ressources de l'Etat et coordonner leurs efforts avec ceux de ce dernier. Ils ont à remplir auprès des gouvernements une fonction d'interprétation des besoins.
>
> L'organisation sociale comporte aussi des groupes, associations et fédérations dont l'intérêt est plus sectoriel que territorial. Il en est ainsi des grandes organisations syndicales, des corporations professionnelles, d'organismes comme les associations ou les fédérations d'universités, de groupements religieux, d'entreprises et d'employeurs, de chambres de commerce, de services sociaux, de commissions scolaires, d'hôpitaux et d'organismes conçus pour l'étude et le développement de secteurs particuliers de services comme le Conseil du Bien-être de Québec ou le Conseil du Québec de l'enfance exceptionnelle. Ces organismes ont aussi des fonctions d'interprétation à l'Etat comme aux organismes régionaux des proglèmes de l'enfance inadaptée en particulier et aspirent à bon droit à participer à l'élaboration des politiques de l'Etat. (G.Q., 1969).

3.1 Intrasystem integration. The reform established a school team that should be at the center of decision-making on the pedagogical organization of the school.

> La poursuite des objectifs de l'école élémentaire par la mise en place d'une organisation pédagogique centére sur l'enfant relève de la responsabilité des éducateurs professionnels. Les expériences vécues au Québec depuis la promulgation du Règlement no 1 confirment cependant qu'une réforme pédagogique en profondeur, comme celle proposée pour l'école élémentaire, ne peut être le résultat d'initiatives individuelles exclusivement. Même si de façon générale les professionnels de l'enseignement du

> cours élémentaire ont manifesté un enthousiasme certain pour se renouveler au plan pédagogique, il demeure que les réalisations concrètes sont trop souvent des faits isolés et pas toujours coordonnés et planifiés, même à l'intérieur d'une seule école. Un changement comme celui-là qui touche les enseignants, à la fois comme individus et comme membres d'un groupe-école, nécessite une action collective qui soit planifiée par les réalisateurs eux-mêmes.
>
> L'équipe de professeurs de chaque école devra prendre à l'égard du type d'organisation pédagogique qu'elle désire recommander pour son école, une décision collective qui tiendra compte de sa compétence, de son dynamisme et des circonstances particulières qui prévalent dans son milieu.
>
> Il faut accepter de partager ses responsabilités avec d'autres et concevoir son rôle d'éducateur comme partie composante d'une action collective humaine. L'aménagement des programmes, l'individualisation de l'enseignement, l'organisation d'activités diversifiées, l'influence de l'école parallèle, comme toutes les autres exigences du progrès continu, obligent l'enseignant à étendre son champ d'action, à briser le cloisonnement qu'érigeait la répartition des élèves en classe-degré. (MEQ, 1976).

3.2 Intersystem integration. An interdepartmental committee on "Enfance Inadaptée" has developed a model of jurisdictional distribution among different provincial departments involved in special services for exceptional individuals.

> Pour assurer une coordination effective de la politique et des programmes de l'enfance inadaptée, il est nécessaire de prévoir la mise en place de mécanismes qui répondent à la préoccupation de coordination tant au niveau provincial qu'au niveau régional. Les organes de coordination particuliers au domaine de l'enfance inadaptée devraient s'intégrer dans le cadre des mécanismes plus généraux de décisions et de planification prévus dans l'appareil gouvernemental. Au plus haut niveau, le conseil des ministres est responsable des décisions gouvernementales et de l'orientation des programmes de planification de l'Etat. L'exécution des politiques relève des ministères ou des organes para-gouvernementaux chargés d'une telle responsabilité. Quant à la planification, elle est du ressort de l'Office de planification qui vient d'être crée par une loi du gouvernement du Québec.

> Les mécanismes de coordination à établir dans le domaine de l'enfance inadaptée pourraient consister en un comité interministériel de planification pour l'enfance inadaptée et dans des conférences régionales pour l'enfance inadaptée formées de fonctionnaires et de représentants des divers services. Les conférences régionales devraient, suivant le cas, transmettre des recommandations au comité interministériel de planification aux responsables régionaux des ministères des ressources humaines ou aux organismes et services communautaires. Le comité interministériel lui-même pourrait présenter ses rapports à une sous-commission interministérielle de planification des ressources humaines dont feraient partie les sous-ministres des ministères concernés. Cette sous-commission remplirait une fonction essentielle de liaison auprès des ministères eux-mêmes grâce à la présence des sous-ministres et auprès de la commission interministérielle créée en vertu de la loi de l'Office de planification. (G.Q., 1969).

Table 15 illustrates the responsibilities of different state departments in services to exceptional individuals.

4- Openness to community

The Quebec Educational system is based on public and elected local and regional school boards which are responsible for the administration of the schools. One of the major problems in the administration of education in Quebec is the weakness of these boards to identify themselves as the real government of education. In fact, the level of centralization of decision by the use of very strict rules at the provincial level is high. This has been highly criticized by school boards, and the Department of Education is proposing some decentralization. The centralized situation has created a certain indifference at the local level about educational affairs. In Quebec, education is more of an issue in the provincial election than in the school board elections. The

Table 15

Interdepartment Responsibility in Québec

Les responsabilités des ministères en fonction de la prévention, du dépistage, du diagnostic et du traitement de l'inadaptation chez l'enfant

	Éducation	**Famille et Bien-être social**	**Santé**	**Justice**	**Travail**
Prévention	Éducation adaptée à l'individu Services personnels aux étudiants	Mesures sociales Services sociaux Services de probation Organisation communautaire	Hygiène publique Éducation populaire Soins maternels et infantiles	Services de police (services d'aide à la jeunesse, clubs juvéniles de la police)	Politiques d'emplois des inadaptés, normes d'emplois des jeunes
Dépistage et orientation	Instituteurs Services personnels aux étudiants	Services sociaux Services de probation Bureaux régionaux	Médecins Unités sanitaires Services de santé municipaux Hôpitaux et services externes	Services de police (services d'aide à la jeunesse)	
Diagnostic	Services des études et services personnels aux étudiants: (diagnostic pédagogique)	Services sociaux et de probation: (diagnostic social)	Médecins, hôpitaux et services externes: (évaluation multidisciplinaire et diagnostic différentiel)	Cours de bien-être social: (diagnostic social)	
Traitement	Éducation spéciale Services personnels aux étudiants	Services sociaux Services de probation Institutions	Médecins Établissements Services externes	Cours de bien-être social (support légal au traitement)	Centres de main-d'oeuvre Ateliers protégés Politiques d'emplois des inadaptés

openness of the educational system to the community is not stimulated by the community itself. The provincial level had to stimulate in some ways such an involvement; this was the objective of the Law 27.

> La Loi 27 (1971) constitue, en un sens le pivot qui permet de raccorder les objectifs de deux décennies. En même temps qu'elle contribue à parachever le mouvement de restructuration scolaire, elle vise à rapprocher, de façon inédite, la structure et le milieu en institutionalisant la présence des parents auprès de chaque école et de chaque commission scolaire. (M.E.Q., 1972, p. 3).

The intention was to facilitate the participation of parents in planning and decision-making as will be shown in section 5.2.

4.1 Community integration. Taking into consideration the previous discussion on openness of the school to the community, part of the reform is also affecting this relationship. In some way Law 27 has introduced the structural base for parent's participation. Experimental projects in low socio-economic environments have also shown the need for a new "community" defined school. In fact, this item does not only refer to parent's participation in educational decision-making but on a larger scheme to integrative relations between the school and the community for cultural purposes. Such a view of a culturally integrated school was brought forward by the experiments in disadvantaged areas, but still no general models have been defined for the entire educational system.

4.2 Permanent educational services. The Province of Quebec offers a wide variety of permanent education programs, through every school board. At the Department of Education level, there is general direction for adult education with the following objectives.

- Assurer à tous les adultes du Québec, des conditions de formation qui leur permettent de s'épanouir dans la totalité de leur devenir économique, social et culturel, et de participer, de façon active, à l'orientation et au développement de la société québécoise.

A l'intérieur de cet objectif global et à long terme, se situe une série de sous-objectifs:

- offrir une gamme d'activités et de projets de formation (économique, sociale, culturelle) susceptibles de convenir aux besoins des individus et de la collectivité;
- rendre les services d'éducation accessibles à l'ensemble de la population adulte d'un milieu donné ou d'une région donnée;
- rejoindre les adultes des groupes défavorisés et leur fournir les moyens de répondre à leurs besoins d'éducation, sur les plans social, culturel, et économique;
- promouvoir, encourager, soutenir et coordonner tout projet éducatif répondant aux besoins des adultes et souscrivant aux objectifs de développement et de promotion collective;
- promouvoir, au niveau des outils pédagogiques, une méthodologie de l'apprentissage adaptée aux adultes;
- aider le personnel pédagogique des instances décentralisées du ministère, à accroître leurs compétences et à développer une véritable "pédagogie des adultes";
- accorder une aide technique et financière à certains organismes qui partagent la responsabilité de l'éducation des adultes;
- assurer la coordination des centres de formation administrés par les instances décentralisées du ministère et des organismes extérieurs au gouvernement qui s'occupent d'éducation des adultes;
- engager et promouvoir des recherches pour résoudre les différents problèmes qui se posent en éducation des adultes;
- implanter et mettre au point une stratégie de réponse aux problèmes d'accueil, d'information, d'orientation et d'animation soulevés par la situation de formation. (M.E.Q., 1972).

On another level, there is a developing trend to offer to adults of 65 or over educational services in order to assist them to organize in their best interest their retirement years.

5- Decentralized integrated planning

As was discussed in 3.2, there is an effort in Quebec to integrate the different services for exceptional individuals at the state level. Intersystem integration has been articulated by the creation of a "comité interministériel de planification". Although this committee is working at the state level, there are provisions for regional activity.

> Le comité interministériel de planification pour l'enfance inadaptée devrait exercer les responsabilités suivantes: analyser les problèmes de l'enfance inadaptée et faire des recommandations sur les politiques et la législation à ce sujet, faire des recommandations sur la programmation du développement des services et la réalisation des projets conjoints, étudier les normes des établissements et des services, examiner les problèmes et politiques de formation de personnel aux fins des services à l'enfance inadaptée, effectuer de façon périodique une évaluation des politiques conjointes dans ce domaine, examiner pour recommandations toutes les questions soumises par les ministères des ressources humaines et par les conférences régionales pour l'enfance inadaptée.
>
> Les conférences consultatives régionales pour l'enfance inadaptée auraient pour tâches d'examiner les besoins de ressources à coordonner dans le domaine de l'enfance inadaptée au niveau régional, de faire des recommandations sur l'organisation du réseau des établissements et des services, d'examiner pour fins de recommandations les projets conjoints de développement, d'évaluer les résultats de la coordination de l'action communautaire et d'assurer la consultation auprès des organismes régionaux en vue de faire des recommandations appropriées.
>
> Les mécanismes de coordination dont il a été fait mention plus haut exerceraient leur influence aux diverses étapes de la mise en place de la politique de l'enfance inadaptée. En effet, ils se retrouveraient à l'étape de l'étude et de la préparation des politiques et des activités, à celle de la décision ministérielle et, finalement, leurs effets se feraient sentir au moment de l'exécution des décisions dans chacun des ministères. L'efficacité de ces mécanismes dépendrait de la volonté ferme des ministères de les utiliser constamment et de les faire fonctionner adéquatement. (G.Q., 1969).

The reorganization of health and welfare services into integrated local and regional centers has also been described in this coordination process. However, the relationship of education or of school boards to these centers has not been directly the object of integration. The service for exceptional children by the Department of Education has developed a "plan directeur" for school boards which wish to organize an integrâted planning of all public services in their areas. This last type of action, even if it is primarily seen as a survey type of study, is intended to facilitate the rationalization of resource used and to facilitate administrative integration as well as the integration of exceptional individuals into the regular process of public services.

5.1 Local long-range planning. The administration of the Quebec educational system is a three levels structure: the provincial level with the Department of Education and the regional and local levels with school boards. Local school boards are responsible for the education in their specific areas. The local boards are grouped in order to form a regional school board for secondary education at the regional level. Planning, therefore, is a process that takes place at local and regional board levels. However, the centralization of authority at the provincial level has been for a long time a factor that has not motivated local authorities to develop long-range planning. The trend toward decentralization and the progression toward a less specific funding process included in the reform has the objective to increase local autonomy and jurisdiction in order to justify and promote local planning. Long-range planning is a new element in that evolution. Until recently most school boards produced year-to-year plans for financial forecasts. Current trends favor three or five year development forecasts. This factor was motivated in part by the rapidly decreasing birth rate and the declining enrolment in the schools. Also the increasing complexity and extension of educational services have called for long-range development planning at the local and regional level as previously was the case at the provincial level. Finally, the need for a better knowledge of the impact of the educational reform has motivated the elaboration of evaluation studies as an aid to planning.

5.2 Agent participation in planning. With the beginning of the reform in Quebec, a new perspective on education has introduced participation by the learner in his own educational planning. The principles of this reform, as discussed in previous sections, included the intention to involve the child in the elaboration of his own educational life. The creation of the "équipe d'école" has also had an impact on the participation by teachers in school-level planning and decision-making. Parent participation both at the school level and at the school board level was introduced by Law 27. Finally, the school boards are elected educational authorities; therefore, public participation is promoted at this level. However, there is still a very low level of involvement in this democratic process. It seems that structures for participation are implemented but the functional aspects of these structures have not been developed to a point or stage where the motivation for participation is qualitatively related to the refinement of the proposed structures.

5.3 Securing control. Control in the Quebec education system is exercised primarily by the school principal. The reform has also affected the roles of the principal.

> Comme administrateur pédagogique et personne-ressource, le directeur de l'école élémentaire préside à l'organisation de la vie pédagogique et disciplinaire de l'école. Divers facteurs concourent à la création de ce milieu de vie. Aussi, il convient de souligner, à titre de suggestion, quelques points particuliers qui doivent retenir son attention et qui s'inspirent, pour une bonne part, d'une étude faite par le Conseil Supérieur de l'Education.
>
> Au plan des options pédagogiques
>
> . assurer le consensus de l'équipe des enseignants sur la compréhension;
>
> - des objectifs généraux de l'enseignement élémentaire;
> - de l'individualisation de l'enseignement;
> - du progrès continu de l'élève;
> - de l'autonomie à laisser à l'élève dans sa démarche de développement de sa personnalité;
>
> . ...
>
> Au plan du travail d'équipe
>
> . assurer la participation des enseignants dans l'élaboration des politiques de l'école;
>
> . faviroser les prises de décision par consensus avec l'équipe;
>
> . respecter la personnalité des individus, professionnels et élèves;
>
> . organiser avec l'équipe-école les contenus et l'animation des journées de travail des enseignants sans la présence des élèves, dans le sens des objectifs visés par le Règlement no 7 (Article 5);
>
> . assurer le re-sourcement du personnel;
>
> . souligner les succès;
>
> . coordonner les initiatives individuelles;
>
> . planifier les moments de rencontre de l'équipe;
>
> . ...
>
> Au plan de la didactique
>
> . conseiller les maîtres au plan de la didactique générale et des objectifs des programmes;
>
> . diriger l'élaboration et l'exploitation du programme institutionnel;

. superviser l'évaluation des élèves;

. assurer la disponibilité de l'instrumentation, du matériel didactique et des équipements;

. être attentif au feedback de diverses provenances;

. encourager la recherche pratique;

. encourager le perfectionnement des méthodes et des techniques d'enseignement;

. permettre des expérimentations proposées par l'équipe;

. ...

Au plan de l'organisation de l'enseignement

. répartir les tâches d'enseignement et autres et faire les affectation;

. promouvoir la création d'un environnement éducatif engageant et humain;

. participer et coordonner la planification des projets d'enseignement;

. assurer l'évaluation périodique des projets, de la démarche et du fonctionnement de l'équipe;

. travailler à perfectionner les modes d'intervention pédagogique;

. s'attribuer certaines tâches qui lui assurent des contacts vrais avec les enfants;

. étudier avec les professionnels enseignants et les professionnels non enseignants le cas des enfants en difficulté d'apprentissage ou en trouble de comportement;

. favoriser le travail d'équipe dans la tâche de l'enseignement;

. ...

Au plan de l'organisation générale

. confier au secrétariat le maximum de ses tâches administratives;

. rendre les services de secrétariat disponibles aux enseignants;

. partager l'administration du budget;

. favoriser et organiser l'information et la participation des parents;

. organiser l'utilisation d'un dossier scolaire cumulatif;

. faire de l'école un centre communautaire pour le milieu;

. organiser la consultation et la participation du personnel-ressource extérieur à l'école (commissions scolaires, ministère et universités);

. consulter les enseignants dans le choix des équipements, du matériel didactique et autres;

. encourager l'exploitation des ressources du milieu;

. collaborer à l'élaboration des politiques de la commission scolaire;

. favoriser les échanges et la collaboration avec d'autres écoles;

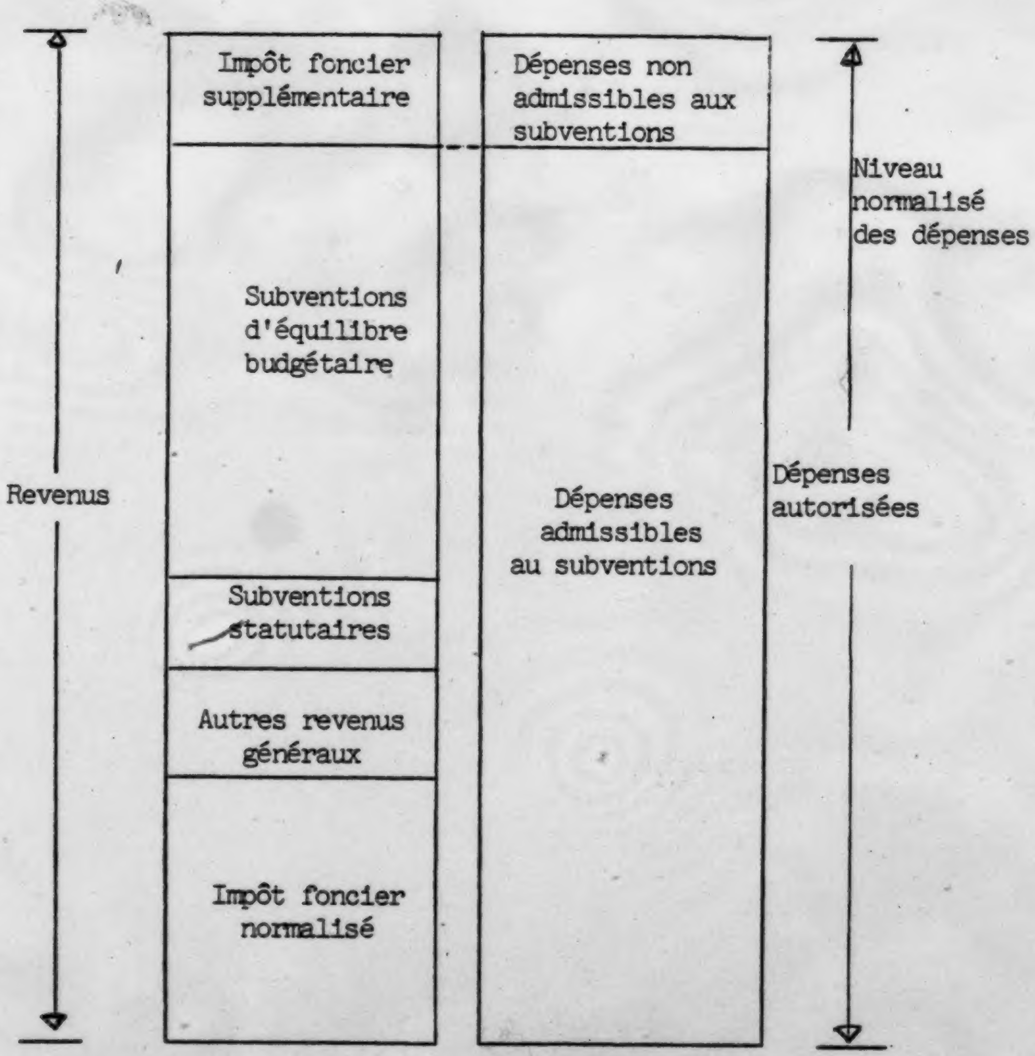
. encourager la publication des succès des différentes expérimentations pédagogiques de son école;
. ... (M.E.Q., 1976).

Such a wide variety of functions should be related, in the first instance, to the human relations climate of the school. The changes in the Quebec education system have placed emphasis on organizational climate, starting in the classroom and involving the entire school; however, transition to the new type of school has not been entirely achieved. Personal attitudes which are at the base of the reform have still to be adjusted to the innovations proposed for the educational intervention. There are still some attitudes which support authoritarian control and closed schools with strict programs. Individualization of education, child centered programs, open classrooms, non-graded schools and other reform elements involve another type of relationship in the school which calls for more personal participation in the life of the school and a shared responsibility type of control rather than centralized, authoritarian control.

5.4 Funding. Financing of education in Quebec is based on two sources of revenues and on a standardized pattern of expenditure. Figure 31 represents the standardization system of revenues and expenditures. Under the "dépenses admissibles" there are two categories of expenditures that are directly related to special education. The first type of expenditure is to be found in the "décret tenant lieu de convention collective". As shown in the "décret" (Appendix II), special education

Figure 31

The Educational Funding Structure in Quebec


Revenus
Impôt foncier supplémentaire
Subventions d'équilibre budgétaire
Subventions statutaires
Autres revenus généraux
Impôt foncier normalisé
Dépenses non admissibles aux subventions
Dépenses admissibles au subventions
Niveau normalisé des dépenses
Dépenses autorisées

teacher-student ratios are established by categories of handicaps. In the budgeting system, expenditure provisions are established by categories of exceptionality.

This budgeting system is based totally on categories of exceptionalities, as far as authorized expenditures are concerned. The current trend in budgeting in Quebec is to shift to a Program Planning Budgeting System. Therefore, some changes may result. The move toward P.P.B.S. should bring a more comprehensive educational or instructional system program budget.

Comments. The Quebec educational system seems to be implementing an educational reform that tends to establish a basic model of education. This is highly congruent with some of the elements of the model developed in this study. The general comment that can be derived from field experience and interviews is that this reform has provided the basis for structural changes and a new pattern of relationships in the schools but has not been followed by a participatory type of operational strategy. In some ways, the reform was dictated by the provincial department of education in accordance with the recommendations of the Parent Commission. The realization of the reform is declared to be a reality for the educators themselves to carry on and to plan. Therefore, strategies that go further than structural innovation, and which provide for long-range development ought to be elaborated. On that basis, special education education strategies for Quebec should focus on the current trends in the entire school reform and also to a decentralized planning process. Elements such as commonality of objectives and programs should be studied. Organizational growth as defined in this report should be developed. Plans have been made for the individualization of education; this should lead to an analysis of the instructional system model in order to integrate special education with these plans. Funding systems could be then modified according to this strategy. Finally, the major interest in child development should be based on a child needs-oriented approach rather than on a strategy of child rearing based on mental process development. Self-realization is based on a multi-level developmental approach not only on mental growth processes, therefore, efforts should be made to avoid the possible dangers of using factors of psychological or social development not only for the purpose of knowledge acquisition but also for integral development. Then, the school reform will not appear only as a new educational technique but as a real effort to respect the child's need for self-actualization.

CONCLUSION

This chapter was an exploration in the use of the inputs determination cluster for the analysis of the degree of discrepancy between the practices of several special education delivery systems and the conceptual model of special education developed in this study. A discrepancy analysis of four educational systems (Sweden, Holland, France and Quebec) was elaborated based on a list of proposed goals derived from this model. It was possible to identify several possibilities in each system for the implementation of the special education model developed in this study even though several elements of the model are not directly developed in the countries studied. Elements such as need-centered curriculum, instructional system model, organizational growth and intra-system functional integration were very low in all systems. These elements can be thought as being the most important elements of the special education model. Therefore, as a general observation, none of these countries present a high level of special education integration as proposed by the model. Many factors studied in this analysis show that some of the countries have a more facilitating approach to education than others; that is to say, potential elements exist in their educational system for a further step toward the implementation of the proposed model and few discrepancies are evident in the goals analysis.

The special education model developed in this study is comprehensive enough to take into consideration all significant elements of development that should be considered in the integration of special and regular education. The discrepancy analysis can be thought of as a prescriptive design for planned changes. In some ways, the analysis in this chapter is superficial, and a more detailed study should be made of each system. Nevertheless, the aim of this chapter was to provide an example of the use of the cluster and list of proposed goals use, and it has shown some of the strategies focused on by each system.

Since the inputs determination cluster is a part of a general planning model that pertains to developing long-range planning, decentralized participation of agents in the planning process and openness of the school, it has to be remembered that any strategies derived from the discrepancy analysis should follow the same objectives. Therefore, tactics should be developed by the educators themselves under the perspectives of shared general strategies of change in order to integrate special education into the regular educational process. The cluster includes a set of proposed goals inscribed in the information system of the planning process; therefore, it represents a framework to be implemented by several tactics based on local realities and potentialities. In some ways, it is assumed that equifinality should prevail in that from a general framework, divergent tactics could be developed which result in similar outcomes.

As specified at the beginning of this chapter, the use of the cluster was not for the purpose of validation; the true test for such a validation is far beyond the limits of this thesis. A long-range planning experiment should be the only real validation of the model of special education.

Finally, one important factor has to be added to the discrepancy analysis, namely, the importance of cultural variations of the different societies. Since the model developed in this study was primarily focused on the functional dimensions of special education and education in general, most of the functional determiners are inscribed in the cultural pattern of the society under study. A comprehensive analysis of official goals would also indicate the relations between educational goals and societal goals. The theoretical relations between these two levels of goals has been discussed in a previous chapter, but it is important to articulate this relationship in the use of the planning model. The exercise has the purpose of enlightening the real intentions of educational planners and the pattern of social evolution. At the outset of this analysis, several hypotheses on the impact of reciprocal societal and educational evolution could be established as far as the situation of the exceptional individual is concerned. These observations would fulfill one of the principal objectives of the study which is the awareness of educators of the ideologies underlying the system of intervention with which they are involved. Furthermore, the use of a long-range developmental planning process will also facilitate the adaptation of actions to an ideological framework which is the critical issue of the elaboration of a systems conceptual model of special education administration.

Chapter VII

SUMMARY, CONCLUSION AND IMPLICATIONS

A deductive approach was used in the elaboration of a system conceptual model of special education. As a first step, a specification of historical trends and actual practices in the form of special education organization was developed. As a second step, General Systems Theory concepts were analysed in terms of their interpretative potential for the elaboration of a conceptual model of special education. This analysis prescribed the logical framework from which the special education model has been developed. From this analysis an attempt was made to integrate the systems logical framework into a conceptual model of an integrated special education delivery system. New concepts were developed, and relationships among concepts were discussed in the specification of the model. A strategy of model implementation through the use of a planning model was also proposed. Finally, an analysis was made of four different educational systems (Sweden, Holland, France, Quebec) with reference to the model and to a planning process.

CONCLUSION

The aim of this study was the elaboration of a systems conceptual model of special education. Systems conceptualization was selected in order to reorient the analysis of special education from traditional structural patterns to a different perspective. Even if a theoretical approach was used in this study, there was no intention to present the conceptual model as a theory. For Rocher (1969), a conceptual model has a descriptive function while a theoretical model has more an interpretative and explanation function.

> On pourrait dire que le modèle conceptuel est un mode de perception de la réalité, tandis que le modèle théorique est un mode d'intelligence de la réalité, ...le modèle conceptuel répond plus particulièrement à l'intention globalisante, tandis que le modèle théorique répond à l'intention d'abstraction logico-expérimentale. (Rocher 1969, p. 278-79).

A conceptual model can be seen as the first step toward the elaboration of a theory. It is the first attempt to establish an organization of concepts. Such a model has also an impact on applied research and practice. A conceptual model can bring order to everyday practice. It can be seen as a prerequisite for operational model development. It was assumed in this study that a sound operational plan is related to some conceptual integration or to a conceptual model. Some writers identify this relation as the relation between theory and practice. Practice should go further than being solely directed by common sense. It should be based on theoretical rationales, it should then be directed by an integrated perception of reality associated with conceptual rigor.

A conceptual model can also be viewed in some way as a philosophical synthesis. To follow Ziegler's (1968) position on the need for philosophies of educational administration, it should be noted that, the philosophic method, instead of refining and delimiting, becomes all-inclusive by drawing from a wide variety of sources available in order to effect the best possible philosophical synthesis. The theoretical background used in this study brought to that synthesis elements beyond a mere common-sense approach. Some of the concepts were derived from well stated theories, while others were borrowed from conceptual frameworks or logical developments.

If a philosophical synthesis is a matter of personal development, this study proved to be very utilitarian for the writer; it was an exercise in personal synthesis, although the scope of the study went beyond personal purposes. The model with its limitations cannot be described as a critically developed theoretical model. Nevertheless, it does open a field of investigation that is relatively new. The interest in an operational model also directed this study. The inputs determination cluster integrated in a general planning model, was developed on the basis of possible practical implementation of the special education model.

This study can be described as a philosophical synthesis, an attempt to bring a new conceptual order into the field of special education organization, an elaboration of an operational model of special education, the development of a strategy of implementation of the model and an analytical tool for comparative analysis of special education systems.

The philosophical synthesis nature of the study is somewhat related to its logico-deductive approach to model development, but this characteristic is more implied in the ideological orientation of the study. The study was ideologically oriented in the pursuit of a desegregation-integration ideology. Such ideology has conducted the development of a special education model. The model itself prescribes new directions in education that could nourish a philosophical discussion on the nature of education itself, although, the aim of the study did not include such a purpose.

The second and third descriptors of the study are related to the development of a new conceptual order in special education. This task was accomplished through the use of an interpretative model, of a "model for" from which special education concepts were reviewed, oriented and therefore ordered into a "model of" special education. The fourth element is oriented toward the implementation of the model. It is related to the need for a process of model implementation. The implementation process is seen as part of a long range planning model which is somewhat different from a set of operational propositions. This approach leads to possible operational differences under a unique conceptual model and is thought of as being more respectful to individual autonomy and creativity.

The last component of the study is related to the use of the special education model as a tool for comparative analysis of different special education systems. The model can be used to show the level or potential of different educational systems for the integration of exceptional children into regular education. This tool presents the advantage of not being related to strict categories of services or exceptionalities but rather based on functional processes, which constitutes a new way to compare special education delivery systems.

Finally, the systems perspective used in this study has also indicated that special education could be organized in educational systems without reference to any categorical approach. Therefore, it was seen as a powerful tool for social integration. By doing so, this approach has enabled the ordering and the identification of the nature of the processes that constitutes an integrated special education delivery system. That constituted the major problem pursued by this study.

IMPLICATIONS

There are many possible implications of this study. Among them are possible research areas that could be developed on several theoretical and practical elements of the model. Even if many hypotheses can be derived from this study, none of them should be seen in a causal relationship with some proposition in the model. The hypotheses and practical propositions on developments should be seen as part of a set of components that constitute the system as included in the special education model.

A new trend in special education. The model elaborated in this study is part of the socio-psychological trend in a prevention ideology. The contribution of this study in the field of special education could be inscribed in the establishment of a better known new trend. As such a careful study of other studies pertaining to this trend could be made in order to establish clearly the distinctiveness of the approach.

Systems conceptual model. As discussed in a past section of this report the systems conceptual perspective as applied to special education constituted a unique characteristic of this study. Other studies in special education following a systems perspective were devoted mainly to operational levels and were based on a systems analysis approach. This study opens the door to further efforts to "conceptualize" special education under a systems perspective. Special education systems conceptualization should follow the evolution of General Systems Theory itself.

Open system man developmental strategy. This study has also included the discussion and integration of a vision of man as an open system. This vision borrowed from Thompson and Van Houten (1970) has to be studied with greater consistency under a strategy of education. The discussion presented in this report appears only as an exploration into that strategy. Further studies should be made in order to specify the nature of energetic and information factors involved in the four dimensions of open system man. Sequential developmental strategies should be derived from such studies and attempts should be made to translate these strategies in curriculum development.

Nature of exceptionality. The theoretical proposition developed in this study on the nature of exceptionality based on the concept of marginality of needs should be further pursued. There seems to be a potential theory of adaptation under such a scheme. As shown in this study there is a great impact of this conceptualization of exceptionality in regards to the nature of special education itself. Also there is a possible integration of concepts between the open system man scheme and the marginality of needs perspective.

Self actualization and special education administration. The open system man and marginality of needs perspectives have a major impact on the nature of education and of special education. This impact can be seen on the definition of educational strategies at the developmental level for the child. Also there is a major impact on the type of human supervision and management in the educational system. Experimentations should be developed following comprehensive statements of hypotheses on the nature of the managerial process based on self-actualization of all participants in educational processes. Further investigations should be made on shared goals and needs in the educational enterprise in order to test the bases for a theory of educational management based on the commonality of personal needs and organizational needs under a self-actualization scheme.

Special education and regular education. The model of special education developed in this study is oriented toward the integration of exceptional children into regular education. The propositions developed by the model are oriented toward the rearrangement of services rather than to new location of children as in many previous models of integration. The principle of integration is rather applied to the global education delivery system where "instructional systems" are integrated. The difference lies in the fact that every educational process is known as an "instructional system". There are no "special" and "regular" systems but rather a set of "instructional systems", the model also includes propositions for non-categorization organization of special education as related to instructional systems. All these modes of organization and other related means could not be tested since no educational system has established its delivery system according to these propositions. Nevertheless the model could be somewhat tested on a continuum of implementation. The model has been used for the analysis of several educational systems. The discrepancy analysis between practices in these systems and the model can indicate the possibility to test the model with the development of a scale based on the propositions included in the model. Such a scale could measure the potentiality of the propositions in terms of the prevention ideology and of the integration principle. The scale would measure the impact of the variables included in the model under a statement like: "If this is organized then what is the level of integration achieved in the system?" This refers to model variables and the integration level should be specified in terms of measurable indicators.

This discussion shows the development to be made in order to achieve a certain level of validation for the model. This further development could also directly serve the need for a quantitative tool for the comparison of special education delivery systems under a more and more universally approved principle of integration or non-segregative practices.

The difficulty in testing the model is related to the nature of man and of exceptionality that have determined the elaboration of the model. That is not to say that the model cannot be implemented without the assumptions of the open-system man strategy, but rather that the full impact of the model propositions can be achieved only if such strategy is adopted. Otherwise there is no possibility for logical consistency in a system model of special education in an educational system based on a closed system view of man or even more of the education process itself.

Training of human resources. Even if there has not been a long discussion in the report on the impact of the model on the training of human resources there are several comments that should be brought forward on that point in this conclusion. Under the perspective of an integrated special education delivery system into regular education, all educational agents should be trained according to five major points.

1- The agent's own self-actualization

2- Holistic view of education and adaptation

3- The instructional system approach to education

4- The cooperative, collective gaining and self actualization view of education as an organization

5- The social and ideological impact of education.

These major points or dimension of human resources training can be seen as an impact for a new field of scientific research, the field of global education.

APPENDIX

APPENDIX I

QUEBEC SUPERIOR COUNCIL OF EDUCATION

RECOMMENDATION ON SPECIAL EDUCATION

RECOMMANDATIONS

NOUS RECOMMANDONS:

1. Que le ministère de l'Education fasse l'inventaire complet et systématique des besoins existants et des ressources disponibles dans le secteur des Inadaptés.

2. Que le ministère de l'Education, de concert avec les associations spécialisées en enfance inadaptée, rende officielle et publique une classification des Inadaptés; que cette classification:

   (a) soit à la fois souple et précise;

   (b) évite les épithètes trop dévalorisantes;

   (c) utilise les critères de classification mentionnés dans le Libre Blanc.

3. Que le ministère de l'Education proclame officiellement le droit de tout enfant à l'éducation et cela en conformité avec la DECLARATION DES DROITS DE L'ENFANT adoptée par l'Organisation des Nations-Unies.

4. Que le ministère de l'Education définisse une philosophie de l'Education des Inadaptés et pose les principes d'une politique à l'égard de cette clientèle scolaire particulière.

5. Que le ministère de l'Education fournisse une information adéquate; que cette information:

(a) renseigne tous les intéressés (éducateurs, parents, le public en général) sur l'action menée par le Ministère concernant les Inadaptés;

(b) soit susceptible de guider avec sûreté tous ceux qui ont à oeuvrer dans ce secteur.

6. Que le ministère de l'Education généralise la formule de l'examen complet de chaque enfant dès son entrée à la maternelle, examen incluant "l'histoire de l'enfant par les parents".

7. Que le ministère de l'Education rende obligatoire le dossier cumulatif qui suivra l'enfant tout au long de ses études. Ce dossier, en plus de renseignements d'ordre purement scolaire - test d'aptitudes et de rendement, bulletins et fiches d'observation -, doit comporter des sections "ouvertes" à remplir par qui de droit de façon à ce que ce dossier renseigne sur les plans médical, social, psychologique.

8. Que le ministère de l'Education établisse une politique à la fois claire et circonstanciée d'intégration des inadaptés dans la vie scolaire.

9. Que le ministère de l'Education accélère l'implantation du Règlement no 1 en ce qui concerne surtout la différenciation des rythmes d'apprentissage.

10. Que le ministère de l'Education procède à la régionalisation des commissions scolaires locales en les intégrant aux structures administratives des Régionales.

11. Que le ministère de l'Education se mette immédiatement à la tâche pour l'élaboration de programmes d'étude spécifiques à l'éducation des enfants exceptionnels et à la présentation de guides pédagogiques conformes à ces programmes-cadres.

12. Que le ministère de l'Education ait recours à la participation de spécialistes pour l'élaboration de ces programmes et de ces guides.

13. Que le ministère de l'Education prenne les mesures suivantes concernant la recherche:

(a) procéder à l'inventaire des recherches déjà effectuées dans notre milieu concernant les inadaptés; favoriser leur publication;

(b) utiliser dans la mesure du possible les résultats de ces recherches pour améliorer l'éducation des inadaptés;

(c) encourager l'Institut de Recherche pédagogique à poursuivre des recherches dans ce secteur.

14. Que le ministère de l'Education établisse des normes budgétaires particulières pour les inadaptés; que ces normes portent entre autres sur le ration maître-élève, le matériel didactique, l'équipement, le transport, les services aux étudiants.

15. Qu'aucune transférabilité ne puisse exister entre ces normes et celles prévues pour l'enseignement régulier.

16. Qu'une politique de cas particuliers soit maintenue au-delà des

normes minimales selon des projets particuliers reconnus comme admissibles pour parer à des situations jugées exceptionnelles.

17. Que dans l'octroi des brevets spécialisés d'enseignement pour inadaptés, le ministère de l'Education exige que soit complété le ler cycle de niveau universitaire; que ces brevets soient décernés là où les maisons de formation ont des formules de stage pratique dans les écoles publiques.

18. Que le ministère de l'Education voit à la description de la clientèle d'inadaptés de façon à ce que les universités connaissent les besoins à combler dans la formation de maîtres spécialisés.

19. Que le ministère de l'Education ne permette l'ouverture de classes pour les inadaptés qu'à la condition d'avoir pour ces classes des titulaires de formation spécialisée de niveau universitaire.

20. Que le ministère de l'Education préconise diverses formules de recyclage et de perfectionnement pour les enseignants oeuvrant dans le secteur des inadaptés.

21. Que le ministère de l'Education favorise la recherche sur la psychologie des inadaptés et les modes d'approche psycho-pédagogique requis.

22. Que le ministère de l'Education favorise, par la voie du Conseil des Universités, la coordination des facultés de l'Education dans la formation d'éducateurs spécialisés pour inadaptés.

23. Que le ministère de l'Education endosse officiellement l'orientation d'une politique pour l'éducation des inadaptés telle qu'esquissé dans le Livre Blanc.

24. Que le ministère de l'Education précise ses responsabilités propres et définisse une politique éducationelle à l'égard des inadaptés.

25. Que le ministère de l'Education s'assure que le nouveau service chargé de l'enseignement aux inadaptés soit suffisamment bien structuré et dynamique pour élaborer et appliquer une politique concernant l'éducation des inadaptés.

26. Que le nouveau service des inadaptés se mette à la tâche pour:

- faire l'inventaire des besoins et des ressources;
- élaborer des programmes et des guides spécifiques;
- définir des normes budgétaires spécifiques;
- définir les besoins à l'égard de la formation des maîtres.

27. Que le nouvel organigramme des structures administratives des commissions scolaires prévoie un service pour les inadaptés, service relevant du directeur de l'enseignement.

28. Que la norme budgétaire pour l'administration pédagogique soit ajustée de façon à permettre effectivement l'engagement du personnel nécessaire au maintien d'un service chargé des inadaptés.

29. Que chaque commission scolaire régionale ait une juridiction

complète dans son territoire sur tous les enfants nécessitant un enseignement particulier; ce qui suppose qu'elle possède les ressources nécessaires pour assumer ses responsabilités et qu'elle soit habilitée à collaborer à l'établissement de services interrégionaux tels que des centres de diagnostic et de référence de cas, des centres d'aide aux délinquants, des services de relance et de placement.

30. Que les commissions scolaires régionales aient les ressources et toute l'autorité nécessaire pour assurer la prévention, le dépistage, l'évaluation, le traitement, la relance des inadaptés dès la maternelle et ce en collaboration avec les services des autres ministères concernés.

31. Que le ministère de l'Education décentralise ses pouvoirs en nommant au niveau des zones administratives un responsable de l'enseignement aux inadaptés.

32. Que le ministère de l'Education s'assure d'une participation dynamique et organisée de la part de ses représentants au sein du Comité interministériel et des Conférences régionales.

33. Que le ministère de l'Education favorise l'établissement des conférences régionales au niveau des zones administratives et qu'il participe au rôle de leadership que doit jouer le Comité interministériel dans ce domaine.

34. Que le ministère de l'Education favorise, par la voie du Comité interministériel et des Conférences régionales, l'établissement de

centres de diagnostic et de centres de références de cas spéciaux, de centres d'étude aux délinquants, de services de relance, de placement.

35. Que des liens étroits soient établis entre les Conférences régionales et les responsables de service aux inadaptés des commissions scolaires régionales et qu'à cette fin chaque responsable de zone soit nommé après consultation du milieu.

Extrait du procès-verbal de la 100e réunion du Conseil supérieur de l'Education, tenue à Montréal les 9 et 10 juillet 1970.

APPENDIX II

GOVERNMENT AND TEACHERS FEDERATION AGREEMENT ON SPECIAL EDUCATION IN QUEBEC

ENFANCE INADAPTEE

I- INTRODUCTION

Après une étude en profondeur des implications issues de la présence d'enfants en difficultés d'adaptation et d'apprentissage dans le système scolaire, le ministère de l'Education adopte un processus permettant aux commissions scolaires d'organiser les enseignements spéciaux requis par l'une et l'autre des catégories d'inadaptations ci-après définies.

II- DEFINITIONS

Pour les fins de l'application de ce processus, le ministère de l'Education adopte les catégories et définitions qui suivent:

A- Enfant en difficultés d'apprentissage ou d'adaptation (enfant inadapté):

Dans une perspective d'organisation scolaire, l'enfant en difficultés d'apprentissage ou d'adaptation (enfant inadapté) se définit comme étant celui qui, en raison d'une déviation intellectuelle ou physique, d'une perturbation affective caractérisée ou de troubles d'apprentissage marqués ne peut profiter de l'enseignement régulier et, par conséquent, doit être soumis à un enseignement spécial dans un groupe approprié.

B- Déviations intellectuelles:

Débile mental léger. L'enfant qui, à une épreuve d'habileté intellectuelle valide, administrée par une personne qualifiée et selon les prescriptions scientifiques, a un quotient intellectuel qui se situe entre 55 et 75.

N.B.: Un écart variable de +5 ou -5 est considéré comme normal dans l'utilisation d'un quotient intellectuel.

Débile mental moyen. L'enfant qui, à une épreuve d'habileté intellectuelle valide, administrée par une personne qualifiée et selon les prescriptions scientifiques, a un quotient intellectuel qui se situe entre 25 et 55.

N.B.: Un écart variable de +5 ou -5 est considéré comme normal dans l'utilisation d'un quotient intellectuel.

C- Déviations physiques:

1- Infirme moteur

L'enfant qui, à la suite d'un accident, d'une maladie, de lésions du système nerveux (mais localisées sur les trajets périphériques), d'une déficience ou d'une malformation congénitale souffre d'un handicap physique qui exige des mesures pédagogiques particulières et/ou des soins intensifs de rééducation physique.

2- Infirme moteur cérébral léger et moyen

L'enfant qui, à la suite d'une atteinte organique légère ou moyenne au niveau des centres de contrôle moteurs du cerveau manifeste une incoordination motrice légère ou moyenne ou des troubles sensori-moteurs légers ou moyens, a besoin de mesures de rééducation physique, sensori-motrice et pédagogique intégrées dans son programme scolaire.

3- Infirme moteur cérébral grave

L'enfant qui, à la suite d'une atteinte organique grave au niveau des centres de contrôle moteurs du cerveau manifeste une incoordination motrice grave ou des troubles sensori-moteurs graves, a besoin de mesures de rééducation physique, sensori-motrice et/ou pédagogique intégrées dans son programme scolaire.

4- Déficient physique

L'enfant qui est atteint d'une maladie organique, extra-cérébrale, suffisamment sévère et/ou nécessitant des soins intégrés à son programme scolaire et des mesures pédagogiques particulières.

5- Epileptique non-contrôlé

L'enfant qui est atteint d'une affection nerveuse chronique caractérisée par des crises convulsives mal ou non contrôlées.

D- Déficiences auditives:

1- Le sourd

L'enfant qui, sur la foi d'un examen approprié, administré par un spécialiste compétent, est déclaré sourd: c'est-à-dire perte auditive se situant à 80 décibels et plus, à l'écoute de la meilleure oreille.

2- Le demi-sourd

L'enfant qui, sur la foi d'un examen approprié, administré par un spécialiste compétent, est déclaré demi-sourd: c'est-à-dire, perte auditive se situant entre 25 et 80 décibels à l'écoute de la meilleure oreille.

E- Déficiences visuelles:

1- L'aveugle

L'enfant qui, sur la foi d'un examen approprié, administré par un spécialiste compétent, est déclaré aveugle.

2- Le demi-voyant

L'enfant qui, sur la foi d'un examen approprié, administré par un spécialiste compétent, est déclaré demi-voyant; c'est-à-dire, capacité visuelle se situant entre 20/70 et 20/200.

F- Déviation socio-affective:

Le mésadapté socio-affectif grave. L'enfant qui, à la suite d'une évaluation psychologique appropriée, administrée par un spécialiste compétent, manifeste des problèmes de comportement affectif et social graves incompatibles avec la qualité et la quantité des groupes scolaires réguliers, doit bénéficier de mesures de rééducation affective et de pédagogie curative dans un groupe structuré à cette fin.

G- Déviations au niveau des apprentissages:

Cette catégorie d'enfants comporte des groupe très hétérogènes. Tous cependant ont cette caractéristique commune: malgré que leurs forces vives intellectuelles, sensorielles et physiques soient normales, ils éprouvent des difficultés variées de nature psychologique et pédagogique.

Plusieurs appellations courantes cherchent à designer cette catégorie: troubles d'apprentissage; troubles de la perception; dyslexie; dyscalculie; dysorthographie; troubles du langage; dysfonction cérébrale; etc... Elles sont ici toutes comprises sous le titre général de déviations au niveau des apprentissages.

Ces déviations peuvent être graves ou mineures. A chaque fois cependant, elles appellent des mesures spéciales.

1- Déviations mineures au niveau des apprentissages

Les déviations mineures ne se retrouvent en principe qu'au niveau élémentaire.

2- Déviations graves au niveau des apprentissages

Les déviations graves, telles que dyslexie, troubles du langage et troubles de lecture graves se retrouvent également au niveau secondaire.

3- Déviations multiples

Quant à la déficience au niveau des prérequis, elle affecte les enfants de 6 ans d'âge chronologique qui, au-delà de la maternelle doivent, en raison de cette déficience particulière, bénéficier d'une classe de maturation (attente).

H- Déviations multiples:

L'expression "déviations multiples" désigne la situation de tout enfant qui présente plus qu'un syndrome à la fois; c'est-à-dire, déviation intellectuelle et/ou déviation physique associée à une déviation socio-affective majeure et/ou une déviation grave au niveau des apprentissages.

III- IDENTIFICATION

Avant d'être placé dans une classe spéciale, ou affecté à des groupes de récupération, l'enfant doit être évalué au moyen d'examens appropriés choisis et administrés par des spécialistes compétents. La période de temps qui s'écoule entre le moment de l'évaluation appropriée et le moment de l'application des mesures orthopédagogiques requises ne doit pas excéder 9 mois de calendrier. Toute relance subséquente à cette première évaluation est obligatoire tous les ans aux plans scolaire, social et médical (handicapés) et tous les 2 ans au plan psychologique.

Il est vraisemblable que certains problèmes de santé ou de comportement aient été décelés chez les enfants dès la naissance. Ces informations de même que les observations notées par la famille, par diverses agences ou cliniques et par l'école doivent être accessibles à la commission scolaire. Celle-ci pourra ainsi procéder à une identification complète des besoins de l'enfant et planifier l'organisation des enseignements spéciaux.

IV- La commission doit préparer un plan indiquant comment elle prévoit organiser efficacement l'enseignement pour les enfants en difficultés d'adaptation et d'apprentissage. Ce plan doit prévoir les services nécessaires à l'enfant physiquement handicapé qui exige des mesures médicales de rééducation physique. De plus, elle doit considérer la possibilité d'établir des ententes avec d'autres commissions scolaires par lesquelles certains enfants en difficultés d'adaptation et d'apprentissage pourront recevoir l'enseignement en dehors de leur territoire respectif. La commission fait parvenir son plan au ministère de l'Education pour approbation.

V- COMITE PROVINCIAL DE L'ENFANCE INADAPTEE

Le ministère de l'Education consulte la C.E.Q., la P.A.P.T., la

P.A.C.T., la F.C.S.C.Q. et la Q.A.O.S.B. et nomme 6 ou 10 membres au comité provincial de l'enfance inadaptée. Il lui appartient de nommer le président. Les membres du comité siègent exclusivement à cause de leur compétence et expérience de l'enfance inadaptée.

Les fonctions du comité se décrivent comme suit:

1- recommander au ministère de l'Education des critères d'ouverture et d'organisation des classes spéciales;

2- après consultation avec les divers organismes et spécialistes du secteur enfance inadaptée, informer le ministère de l'Education de toutes modifications qu'il jugera opportun d'apporter aux critères;

3- le ministère de l'Education sollicitera l'avis du comité sur toutes questions relatives aux plans d'organisation de classes spéciales soumises par les commissions scolaires et qui s'écartent des critères établis;

4- préparer des recommandations relatives à une meilleure coordination régionale et provinciale des ressources publiques et privées en éducation de l'enfance inadaptée;

5- préparer, pour le bénéfice du ministère de l'Education, des recommandations relatives aux politiques générales qui régissent l'éducation des enfants en difficultés d'apprentissage et d'adaptation;

6- veiller, en collaboration avec le ministère de l'Education, à ce qu'aucun élève ne demeure en classe spéciale plus de 2 ans sans que des spécialistes compétents procèdent à une réévaluation sérieuse de l'inadaptation.

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